Impact of Management Accounting Practice on Financial Performance: Evidence from Listed Manufacturing Companies in Bangladesh

A Thesis Submitted to the Department of Accounting, Faculty of Business Studies, University of Dhaka in the Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Prepared by

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AUTHOR'S DECLARATION

I hereby declare that the dissertation entitled "Impact of Management Accounting Practice on Financial Performance: Evidence from Listed Manufacturing Companies in Bangladesh" is a record of original research work carried out by me during 2019 - 2025 under the guidance and supervision of Prof. Md. Maksudur Rahman Sarker, FCMA, and Prof. Dr. Md. Musfiqur Rahman, FCMA, Department of Accounting, University of Dhaka. This dissertation contains no material previously published or written by another person except where due reference has been made in the text. Further, I declare that the present research work is not submitted to any other university or institution for the award of any degree.

(**Fahmida Begum)**

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C E R T I F I C A T E

This is hereby certified that Fahmida Begum, **Registration No. 22, Session: 2019-20 (50/2023-2024, Re-Admission)** is a PhD student under the Department of Accounting and Information Systems and has prepared this thesis titled 'Impact of Management Accounting Practice on Financial Performance: Evidence from Listed Manufacturing Companies in Bangladesh' under our supervision. This work is original and has not been published or submitted for the purpose of publication elsewhere.

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Title: Impact of Management Accounting Practice on Financial Performance: Evidence from Listed Manufacturing Companies in Bangladesh

Supervisors: The doctoral thesis was conducted under the supervision of **Professor Maksudur Rahman Sarker, FCMA**, in the department of Accounting at the University of Dhaka. Professor **Dr. Md. Musfiqur Rahman, FCMA,** in the department of Accounting at the University of Dhaka, contributed as a co-supervisor for the study.

Abstract and Keywords

Purposes: *There have been recent calls for additional research in order to enhance the understanding of the need for a multiple-perspective approach for studying Management Accounting Practice (MAP) and potential contingency factors that explain the adoption of MAP. The motivation for this research stems from a lack of knowledge about the current use of MAP, particularly in developing countries. Therefore, this research aims to investigate the adoption of MAP and their correlations with external factors that impact organizational performance, particularly financial performance, in Bangladesh, a developing country. This research explores the uptake of a broad range of MAP in manufacturing companies in Bangladesh, determines factors that affect the extent of use of MAP, and lastly examines the relationship between the use of MAP and the financial performance of the manufacturing industry.*

Methodology and Data: *The study employed a quantitative research method, utilizing a sample size of 78 and collecting data via a structured questionnaire. This study applied a multivariate regression analysis, a structural equation model, and a mediation analysis to measure the impact.*

Findings: *The results show that the majority of respondents have identified the five management accounting areas, such as costing, budgeting, performance evaluation, information for decision-making, and strategic management accounting. The use of the costing system, budgeting system, and performance evaluation system is significantly higher than for the decision support system and strategic management accounting, which indicates that the uptake of traditional MAP is greater than for sophisticated MAP. The results show that traditional management accounting practice are popular in Bangladesh, whereas contemporary management accounting practice are less common. The findings also appear to confirm recent studies in other countries about the popularity of traditional practice over the much-acclaimed advanced ones. The costing method has a significant and positive impact on financial performance. The costing system employs a*

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positive relationship to clarify financial performance. An empirical study suggests that using budgeting methods improves financial performance. Both variables have a statistically significant positive association. Efficient decision-making positively influences performance evaluation. Research has shown that improvements in effective decision-making lead to a rise in financial performance. An effective decision-making process helps optimize a company's financial performance. Strategic analysis's coefficient value provides a positive explanation for financial performance. An incremental enhancement of the application of strategic analysis within a company has yielded a corresponding improvement in the financial performance of the industrial sectors in Bangladesh. Regarding contingent factors, increase in organizational size results in a slight increase in the use of MAP. An increase in ownership practice results in a significant and positive improvement in MAP utilization. Further, the study found that four out of five contingent factors size of the company, age of the company, participation of the owner or manager in the development of MAP in the company, and use of information technology have a positive relationship with the use of certain MAP, while qualified accounting personnel have a negative coefficient. Finally, the mediation effect is significant, making it acceptable. The coefficient of MAP measures the direct influence of the independent variable without the involvement of a mediator variable.

Research Implications and Contribution: *The findings contribute to both academic understanding and practical insights by elucidating the nuanced interplay between Management Accounting Practice and corporate outcomes within the context of the Bangladeshi manufacturing sector. The study offers valuable guidance for industry practitioners, policymakers, and regulatory bodies, facilitating informed decision-making and strategic resource allocation aimed at enhancing organizational performance and fostering sustainable growth in the manufacturing industry.*

Keywords: Bangladesh, Contingent Factors, Financial Performance, Management Accounting Practices, Manufacturing Companies

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Table of Content

Author's Declaration		ii
Certificate		iii
Acknowledgment		iv
Abstract		v
List of Contents		vii
List of Tables		xv
List of Figures		xxi
List of Abbreviations		xxii

Chapter 1	**Introduction**	**1-17**
	1.1 Background	**1-5**
	1.2 Problem statement/Research Gap	**5-10**
	1.3 Research questions	**11-11**
	1.4 Research objectives	**11-11**
	1.5 Motivation of the study	**12-13**
	1.6 Contribution of the study	**14-16**
	1.7 Limitation of the study	**16-16**
	1.8 Ethical Approval	**16-17**
	1.9 Conclusion	**17-17**
Chapter 2	**Conceptual and Theoretical Framework**	**18-48**
	2.1 Introduction	**18-18**
	2.2 Related Theory for Management Accounting Research	**18-20**
	2.3 Management Accounting Research – Mainstream versus Alternative Approaches	**20-31**
	2.3.1 Mainstream Approaches for Studying Management Accounting	**20-27**
	2.3.2 Alternative Approaches in Management Accounting Research	**27-31**

Dhaka University Institutional Repository

	2.4 Management Accounting Research: Gap between Theory & Practice	**31-36**
	2.5 Reviews that have shaped the development of management accounting	**36-38**
	2.6 Contingency Theory	**38-46**
	2.6.1 Application of Contingency Theory in Management Accounting Research	**40-43**
	2.6.2 Framework of the Implementation of Contingent Factors and MAPs	**43-45**
	2.6.3 Framework of Financial Performance with the Implementation of MAPs	**45-46**
	2.7 Framework of Mediation Analysis as Rationalized Decision Making is a Mediating variable	**46-48**
	2.8 Conclusion	**48-48**
Chapter 3	**Literature Review and Hypothesis Development**	**49 -131**
	3.1 Introduction	**49-49**
	3.2 Management Accounting and Evaluation of Management Accounting	**49-68**
	3.2.1 Definition of Management Accounting	**51-54**
	3.2.2 Perspectives on the Origin of Management Accounting	**54-57**
	3.2.3 Development of Management Accounting	**57-69**
	3.3 Management Accounting Research: "Gap between Theory & Practice"	**69-74**
	3.4 Research into Management Accounting Practices	**74-97**
	3.4.1 Management Accounting Practices in developed countries	**75-80**
	3.4.2 Management Accounting Practices in developing countries	**80-91**
	3.4.3 Management accounting Practices in Bangladesh	**91-97**

Dhaka University Institutional Repository

	3.5 Management accounting within a contingency framework	**97-108**
	3.5.1 Evidence from Manufacturing Sectors	**97-101**
	3.5.2 Hypothesis Development	**101-108**
	3.6 Management accounting practices and organizational performance	**108-122**
	3.6.1 Types of Performance Measures used in Prior Research/ Determinants of Financial Performance in Manufacturing Firm	**109-111**
	3.6.2 Empirical Evidence on MAP and FP	**111-117**
	3.6.3 Evidence from Manufacturing Sectors and Hypothesis Development	**118-123**
	3.7 Empirical Studies on Rationalized Decision-making and the Role of Management Accounting	**123-128**
	3.8 Connection with MAPs & RDM	**128-130**
	3.9 Conclusion	**130 -131**
Chapter 4	**Research design and methodology**	**132 -169**
	4.1 Introduction	**132-132**
	4.2 Research Philosophy	**132-133**
	4.3 Research Paradigm	**133-134**
	4.4 Research Design and Research Approach	**134-137**
	4.4.1 Research Design	**134-136**
	4.4.2 Research Approach	**136-138**
	4.5 Measurement of Variables	**138 -149**
	4.5.1 Measurement and Scale	**138-138**
	4.5.2 Measurement of the Research Contingent Factor	**139-141**
	4.5.3 Measurement of the Extent of the Use of MAP	**141-147**
	4.5.4 Measurement of the Impact of MAP on FP	**147-149**
	4.6 Sample selection method	**149- 158**

Dhaka University Institutional Repository

	4.6.1 Stratified Random Sampling	**150-154**
	4.6.2 Purposive or Expert Sampling	**154-157**
	4.7 The method of data collection	**157 -158**
	4.7.1 Questionnaire Development	**157-157**
	4.7.2 Data Collection	**157-158**
	4.7.3 Logic behind the Use of Questionnaire Method	**158-158**
	4.8 Method of data analysis	**158-164**
	4.8.1 Descriptive Analysis	**159-159**
	4.8.2 Regression Analysis	**160-165**
	4.9 Validity and Reliability	**165-166**
	4.9.1 Factor Analysis (FA)	**165-165**
	4.9.2 Cronbach's Alpha and Hoteling's T-Squared Test	**166-166**
	4.9.3 KMO and Bartlett's Test	**166-166**
	4.10 Mediation Analysis	**166-167**
	4.11 Measure Rationalized Decision as a Mediating Variable and Connection with MAPs	**167-169**
	4.12 Conclusion	**169-169**
Chapter 5	**Manufacturing Sector in Bangladesh**	**170-188**
	5.1 Introduction	**170-171**
	5.2 Growth rate of Manufacturing Sector	**172- 174**
	5.3 An overview of Manufacturing Sector in Bangladesh	**174-184**
	5.3.1. The Contribution of Manufacturing Sector in Bangladesh Economy	**174-176**
	5.3.2 Employment Opportunity in Manufacturing Sector	**176-180**
	5.3.3 The role of the government of Bangladesh for Manufacturing Sector	**180-182**
	5.3.4 Opportunities and Challenges for Manufacturing Sector	**182-184**
	5.4 Contribution towards Economic Growth	**184-188**
	5.5 Conclusion	**188-188**

Dhaka University Institutional Repository

Chapter 6	**Extent of the Use of Management Accounting Practices**	**189-257**
	6.1 Background	**189-190**
	6.2 Characteristics of Management Accounting Practices	**190-172**
	6.2.1 Traditional and Contemporary Management Accounting	**192-198**
	6.3 Management Accounting Frameworks	**198-210**
	6.4 Research into specific area of management accounting practices	**210-231**
	6.4.1 Costing	**210-218**
	6.4.2 Budgeting	**219-222**
	6.4.3 Performance evaluation	**223-227**
	6.4.4 Information for Pricing and Decision Making	**227-230**
	6.4.5 Strategic management Accounting	**230-231**
	6.5 Empirical Results and Discussion	**231-247**
	6.5.1 Research Methodology	**231-232**
	6.5.2 Extent Use of Costing Tools	**232-237**
	6.5.3 Extent Use of Budgeting Tools	**237-241**
	6.5.4 Extent Use of Performance Evaluation Tools	**241-245**
	6.5.5 Extent Use of Decision-Making Tools	**245-249**
	6.5.6 Extent Use of Strategic Analysis Tools	**249-253**
	6.6 Conclusion	**253-257**
Chapter 7	**Contingent Factors and Management Accounting Practices**	**258-292**
	7.1 Introduction	**258-259**
	7.2 Different Forms of Contingency Fit in Management Accounting (MA)	**259-261**
	7.3 Organizational Activity for Contingency-based MAPs	**261-262**
	7.4 Management Accounting Practices and Contingent Factors	**262-271**
	7.4.1 Costing and Contingent Factors	**263-265**
	7.4.2 Strategic Management or Strategic Cost Management and Contingent Factors	**265-267**
	7.4.3 Budgeting and Contingent Factors	**268-271**

Dhaka University Institutional Repository

	7.4.4 Performance Evaluation & Contingency Factors	**271-275**
	7.4.5 Decision Making System and Contingency Factors	**275-277**
	7.5 Empirical Results and Discussion	**277-283**
	7.5.1 Methodology	**277-277**
	7.5.2 Contingent Factors on Extent Use of MAPs	**277-284**
	7.5.3 Multivariate Regression Output Regarding Contingent Factors impact on Extent Use of MAPs	**284-289**
	7.7 Conclusion	**289-292**
Chapter 8	**The Impact of Management Accounting Practices on financial performance of the manufacturing companies in Bangladesh**	**293- 306**
	8.1 Introduction	**293-295**
	8.2 Perspectives of Performance	**296-297**
	8.2.1 Financial Performance (FP)	**298-298**
	8.2.2 Determinants of Financial Performance in Manufacturing Firms	**299-300**
	8.2.3 Accounting Measure to Evaluation Firm Performance	**300-303**
	8.3 Organizational Performance: Objective vs. Subjective	**303-304**
	8.4 Management Accounting Practices (MAPs) and Financial Performance (FP)	**304-312**
	8.4.1 Costing and Financial Performance	**305-307**
	8.4.2 Budgeting and Financial Performance	**307-308**
	8.4.3 Performance Evaluation and Financial Performance	**308-309**
	8.4.4 Decision Making and Financial Performance	**309-309**
	8.4.5 Strategic Analysis and Financial Performance	**309-310**
	8.5 Limitations of Performance Measure	**310-312**
	8.6 Empirical Results and Discussion	**312-333**

Dhaka University Institutional Repository

	8.6.1 Impact of Costing Impact on Financial Performance	**312-317**
	8.6.2 Impact of Budgeting Impact on Financial Performance	**317-321**
	8.6.3 Impact of Performance Evaluation Impact of Financial Performance	**321-325**
	8.6.4 Impact of Decision Making Impact on Financial Performance	**325 -328**
	8.6.5 Impact of Strategic Analysis on Financial Performance	**329-333**
	8.7 Hypothesis Testing	**333-333**
	8.8 Objective Measures and Objective Measures of Financial Performance	**334-336**
	8.8.1 Objective Measures	**334-334**
	8.8.2 Subjective Measures	**334-335**
	8.8.3 The Use of both Objective and Subjective Measures	**335-337**
	8.8.4 Are Subjective Business Performance Measures Justified?	**337-338**
	8.8.5 Empirical Results of Subjective and Objective Measure	**338-342**
	8.9 Operationalize the Subjective Measure and Objective Measure of FP	**342-344**
	8.10 Conclusion	**344-344**
Chapter 9	**Impact of Mediating Variable Rationalized Managerial Decision (RMD)**	**345-354**
	9.1 Introduction	**345-346**
	9.2 Strategic Decision-making and the Role of Management Accounting	**346-347**
	9.3 Empirical Studies	**348-349**
	9.4 Research Hypotheses	**349-351**
	9.5 Empirical Results and Discussion	**351-354**
	9.6 Conclusion	**354-354**

Dhaka University Institutional Repository

Chapter 10	Conclusions	**355-330**
	10.1 Introduction	**355-356**
	10.2 Findings of the Research	**356-359**
	10.2.1 Management Accounting Practices	**356-362**
	10.2.2 Contingent Factors	**362-363**
	10.2.3 Management Accounting Practices and Financial Performance	**363-365**
	10.2.4 Subjective and objective analysis	**366 -366**
	10.2.5 Mediating Effect	**366 -367**
	Recommendations	**367-368**
	10.3 Originality of the Research	**368 -363**
	10.3.1 Originality, as shown by the topic, researched or the methodology employed	**370-370**
	10.3.2 Carrying out empirical work that has not been done before	**370-370**
	10.3.3 Ability to make critical use of published work and source materials	**370-371**
	10.3.4 Being cross-disciplinary and using different methodologies	**371-371**
	10.3.5 An understanding of appropriate techniques	**371-371**
	10.3.6 Worthy, in part, of publication	**371-371**
	10.4 Contributions of the Research	**371-373**
	10.5 Implications for Future Research	**373-374**
	10.6 Limitations and Future Research	**374-375**
	References	**371-411**
	Appendix Tables	**412-440**
	Questionnaire	

Dhaka University Institutional Repository

List of Tables

Table Number	Table Heading	Page Number
Table 2.1	*The Main Assumptions of Mainstream, Interpretive and Critical Research*	25
Table 3.1	*The Evolution of Management Accounting*	68
Table 3.2	*Characteristics of Management Account Description in Practices in Four Stages of Evolution*	68
Table 3.3	*Evaluation of TMATs and TMATs in New Zealand*	76
Table 3.4	*Management Accounting Applications in Barbados*	81
Table 3.5	*Views of Management Accounting Practices (MAPs)*	82
Table 3.6	*Management Accounting Applications in Ghana*	83
Table 3.7	*Evaluation of Management Accounting Practices (MAPs)*	83
Table 3.8	*Evaluation of Management Accounting Applications in Konya*	83
Table 3.9	*Cost Accounting in Istanbul*	87
Table 3.10	*Evaluation of MAPs in Egyptian Manufacturing Firms*	88
Table 3.11	*Evaluation of Management Accounting Quality*	88
Table 3.12	*Comparison between (TMAP) and (CMAP)*	90
Table 3.13	*Management Accounting Practices in Pakistan*	90
Table 3.14	*Identifies Different Management Accounting Practices*	96
Table 3.15	*Summary of the Studies about the Association between Company Size and MAPs*	103
Table 3.16	*Financial Performance Measurement Criteria*	109
Table 3.17	*Evaluation of MAPs in Ghana*	118
Table 3.18	*Financial Performance of Manufacturing Companies in Kenya.*	121
Table 4.1	*Stratification of Population*	151
Table 4.2	*List the Population*	151
Table 4.3	*Sample from Each Stratum*	153

Dhaka University Institutional Repository

Table 4.4	**Categories of the Company (Percent (%))**	**153**
Table 4.5	**Justifications of Sample from Each Stratum**	**155**
Table 4.6	**Justifications of Respondents by Top Management**	**156**
Table 4.7	**Structure of Rationalized Managerial Decision (RMD)**	**167**
Table 4.8	**Justification of Rationalized Decision Making**	**168**
Table 5.1	***Categories of Industries***	**170**
Table 5.2	**Investment, Production and Employment of BSCIC Industrial Estates**	**176**
Table 5.3	***Yearly Investment, Production and Employment of BSCIC Industrial Estates***	**177**
Table 5.4	***RMG Progress in Bangladesh (Value in Million USD (Fiscal Year Basis)***	**178**
Table 5.5	***Zone-wise Statistics of Industries Investment Export and Employment of EPZs***	**181**
Table 5.6	***Product-wise Number of Enterprises, Investment & Employment***	**182**
Table 5.7	***Industrial Sector's Growth Rate of GDP (Base Year: FY16)***	**186**
Table 5.8	***Volume of Manufacturing Sectors (Crore Tk)***	**187**
Literature Matrix 6.0	***List of MAPs from Previous Research (Continued)***	**194**
Table 6.1	***Reliability Statistics***	**232**
Table 6.2	***Hotelling's T-Squared Test***	**232**

Dhaka University Institutional Repository

Table 6.3	*KMO and Bartlett's Test*	**233**
Table 6.4	*Principal Component Analysis*	**233**
Table 6.5	*Descriptive Statistics of Usage of Traditional Costing in Respondents Company*	**235**
Table 6.6	*Descriptive Statistics of Usage of Contemporary Costing in Respondents Company*	**236**
Table 6.7	*Descriptive Statistics of Usage of Strategic Costing in Respondents Company*	**237**
Table 6.8	*Reliability Statistics*	**237**
Table 6.9	*Hotelling's T-Squared Test*	**238**
Table 6.10	*KMO and Bartlett's Test*	**238**
Table 6.11	*Principal Component Analysis*	**238**
Table 6.12	*Descriptive Statistics of Usage of Traditional Budgeting in Respondents Company*	**239**
Table 6.13	*Descriptive Statistics of Usage of Contemporary Budgeting in Respondents Company*	**240**
Table 6.14	**Reliability Statistics**	**241**
Table 6.15	**Hotelling's T-Squared Test**	**241**
Table 6.16	**KMO and Bartlett's Test**	**241**
Table 6.17	*Principal Component Analysis*	**241**
Table 6.18	*Descriptive Statistics of Usage of Contemporary Performance Evaluation System in Respondents Company*	**243**
Table 6.19	*Descriptive Statistics of Usage of Non-Financial Performance Evaluation System in Respondents Company*	**244**
Table 6.20	*Reliability Statistics*	**245**
Table 6.21	*Hotelling's T-Squared Test*	**245**

Dhaka University Institutional Repository

Table 6.22	**KMO and Bartlett's Test**	**246**
Table 6.23	**Principal Component Analysis**	**246**
Table 6.24	***Descriptive Statistics of Usage of Traditional and Contemporary Decision Making in Respondents Company***	**247**
Table 6.25	***Reliability Statistics***	**249**
Table 6.26	***Hotelling's T-Squared Test***	**249**
Table 6.27	***KMO and Bartlett's Test***	**250**
Table 6.28	***Principal Component Analysis***	**250**
Table 6.29	***Descriptive Statistics of Usage of Strategic Planning in Respondents Company***	**251**
Table 6.30	***Descriptive Statistics of Usage of Customer Accounting in Respondents Company***	**252**
Table 6.31	***Descriptive Statistics of Usage of Strategic Decision in Respondents Company***	**252**
Table 6.32	***Descriptive Statistics of Usage of Competitor Accounting in Respondents Company***	**253**
Table 7.1	***Organization's Size Influence the Extent of the Use of MAPs***	**278**
Table 7.2	***Frequency Distribution of Size***	**278**
Table 7.3	***Descriptive Statistics of Size***	**278**
Table 7.4	***Age of the Company or the Years of Operations***	**279**
Table 7.5	***Age of the Company Influence the Extent of the Use of MAPs***	**280**
Table 7.6	***Ownership Practices Influence the Extent of the Use of MAPs***	**280**
Table 7.7	**Qualifications and Years of Experience of the Respondents**	**282**
Table 7.8	***Qualified Stuffs Influence the Extent of the Use of MAPs***	**282**
Table 7.9	***Uses of Information Technology Influence the Extent of the Use of MAPs***	**283**

Dhaka University Institutional Repository

Table 7.10	*Use of Information Technology Influence the Extent of the Use of MAPs*	**284**
Table 7.11	*Value of R Square and F-Statistics*	**286**
Table 7.12	*Spearman's Correlations*	**286**
Table 7.13	*ANOVA[a] Test*	**286**
Table 7.14	*Regression Output of Contingent Factors on MAP*	**287**
Table 7.15	*Durbin Watson Statistics*	**287**
Table 7.16	*Residuals Statistics*	**282**
Table 7.17	*Decision on Hypothesis*	**289**
Table 8.1	*Proposition of Financial Performance*	**294**
Table 8.2	*Performance Dimensions Measure*	**296**
Table 8.3	*Justification of Performance Measure*	**302**
Table 8.4	*Reliability Statistics*	**313**
Table 8.5	*Hotelling's T-Squared Test*	**313**
Table 8.6	*KMO and Bartlett's Test*	**313**
Table 8.7	*Principal Component Analysis*	**314**
Table 8.8	*R Square and Adjusted R Square*	**315**
Table 8.9	*Model Fit Evidence*	**315**
Table 8.10	*Reliability Statistics*	**317**
Table 8.11	*Hotelling's T-Squared Test*	**318**
Table 8.12	*KMO and Bartlett's Test*	**318**
Table 8.13	*Principal Component Analysis*	**318**
Table 8.14	*R Square and Adjusted R Square*	**313**
Table 8.15	*Model Fit Evidence*	**313**
Table 8.16	*Reliability Statistics*	**315**
Table 8.17	*Hotelling's T-Squared Test*	**316**
Table 8.18	*KMO and Bartlett's Test*	**316**
Table 8.19	*Principal Component Analysis*	**316**
Table 8.20	*R Square and Adjusted R Square*	**317**
Table 8.21	*Model Fit Evidence*	**317**

Dhaka University Institutional Repository

Table 8.22	*Reliability Statistics*	**319**
Table 8.23	*Hotelling's T-Squared Test*	**319**
Table 8.24	*KMO and Bartlett's Test*	**320**
Table 8.25	*Principal Component Analysis*	**320**
Table 8.26	*R Square and Adjusted R Square*	**321**
Table 8.27	*Model Fit Evidence*	**321**
Table 8.28	*Reliability Statistics*	**323**
Table 8.29	*KMO and Bartlett's Test*	**323**
Table 8.30	*Principal Component Analysis*	**323**
Table 8.31	*R Square and Adjusted R Square*	**325**
Table 8.32	*Model Fit Evidence*	**325**
Table 8.33	*Decision on Hypothesis*	**327**
Table 8.34	*Reliability Statistics*	**333**
Table 8.35	*Factor Structure of Subjective and Objective Analysis*	**333**
Table 8.36	*Model Fit Evidence*	**334**
Table 9.1	**Direct, Indirect, and Total Effects of the Mediation Model**	**344**
Table 9.2	**Summary of Mediation Analysis**	**344**
Table 9.3	**Model Fit Evidence**	**345**
Table 9.4	*Decision on Hypothesis*	**345**
Table 10.1	*Significance level of MAPs*	**350**

Dhaka University Institutional Repository

List of Figures

Figure Number	Figure Heading	Page Number
Figure 2.1	*Management Accounting Research Taxonomy*	22
Figure 2.2	*Giddens Model of Structuration*	30
Figure 2.3	*Conceptual Framework of Contingent Factor and Management Accounting Practices*	44
Figure 2.4	*Conceptual Framework of Management Accounting Practices and Financial Performance*	46
Figure 2.5	*Framework of Mediation Analysis as Rationalized Decision Making is a Mediating variable*	47
Figure 4.1	*Flow Diagram of this Research*	134
Figure 4.2	*Deductive Research Approach*	136
Figure 4.3	*Graphical Presentation of Sample Size Determination*	150
Figure 5.1	*Increasing trend of Industrial Contribution*	165
Figure 5.2	*Sub-sectors of the SMEs*	166
Figure 5.3	*Contributions of Different Industrial Categories to the Economy of Bangladesh*	167
Figure 6.1	*Costing Pillars*	197
Figure 6.2	*Budgeting Pillars*	199
Figure 6.3	*Performance Evaluation Pillar*	200
Figure 6.4	*Decision Support System*	202
Figure 6.5	*Strategic Management Accounting Pillars*	203
Figure 8.1	*Costing Impact on Financial Performance*	310
Figure 8.2	*Budgeting Impact on Financial Performance*	314
Figure 8.3	*Performance Evaluation Impact of Financial Performance*	318
Figure 8.4	*Decision making impact on financial Performance*	322
Figure 8.5	*Impact of Strategic Analysis on Financial Performance*	326
Figure 8.6	*Subjective and Objective Measure of Financial Performance*	335
Figure 9.1	*Framework of Mediation Analysis*	343

Dhaka University Institutional Repository

List of Abbreviations

Abbreviation	Full Form
ABC	Activity Based Costing
ABB	Activity-based budgeting
ANOVA	Analysis of variance
AGFI	Adjusted Goodness of Fit Index
ADB	Asian Development Bank
AICPA	American Institute of Certified Public Accountants
AMT	Advanced Manufacturing Technology
BSC	Balanced Score Card
BOD	Board of Director
BSCIC	Bangladesh Small and Cottage Industries Corporation
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BEZA	Bangladesh Economic Zones Authority
BSC	Balanced Scorecard
CIMA	Chartered Institute of Management Accountants
CFO	Chief Financial Officer
CFA	Confirmatory factor analysis
CIMA	Chartered Institute of Management Accountants
CFI	Comparative fit index
IMA	Institute of Management Accountants
CA	Cost Accounting
CMIN	Chi-square minimum
CS	Company Secretary
CT	Contingency Theory
CVP	Cost-Volume-Profit
DSE	Dhaka Stock Exchange
EE	External Environment
EVA	Economic Valued Added

Dhaka University Institutional Repository

EPZs	Export Processing Zones
FP	Financial Performance
FDI	Foreign Direct Investment
GMAP	Goals of Management Accounting Principles
GFI	Goodness of Fit
GDP	Gross Domestic Product
H	Hypothesis
IMAPS	International Management Accounting Practice Statement
IT	Institutional Theories
ICT	Information and Communication Technology
IFCA	International Federation of Accountants
IFI	Incremental fit index
JOC	Job Order Costing
JIT	Just in Time
KMO	Kaiser–Meyer–Olkin
KPIs	Key Performance Indicators
LDCs	Least developed countries
LCC	Life Cycle Costing
MA	Management accounting
MAPs	Management accounting Practices
MCS	Management Control Systems
MVA	Manufacturing Value Added
NFI	Normed Fit Index
NFPMs	Non-Financial Performance Measures
NPM	Net Profit Margin
NIE	New Institutional Economics
NIS	New Institutional Sociology
NPV	Net Present Value
OS	Organizational Structures
PC	Process Costing

Dhaka University Institutional Repository

PM	Performance Management
PPP	Public Private Partnership
RT	Reliability Test
RMR	Root mean square residual
RMD	Rationalized Managerial Decision
RMG	Ready Made Garments
ROA	Return on Asset
ROE	Return on Equity
ROI	Return on Investment
RFI	Relative Fit Index
SEC	Security Exchange Commission
SEM	structural equation model
SME	Small and Medium Enterprises
SEZs	Special Economic Zones
SMI	Survey of Manufacturing Industry
SDGs	Sustainable Development Goals
SMA	Strategic Management Accounting
TEI	Traditional Institutional Economics
TLI	Tucker-Lewis index
UK	United Kingdom
USA	United State of America
WTO	World Trade Organization

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Chapter 1

Introduction

1.1 Background of the Study

Management accounting (MA) is solely responsible for providing valuable resources that support organizations in accumulating cost accounting data and financial and non-financial information. According to Horngren (1995), management accounting assists managers in measuring, analyzing, and reporting financial and nonfinancial information when making decisions to achieve an organization's goals. Noreen et al. (2020) focused on how management accounting information can assist managers in carrying out their duties. These include assisting businesses with decision-making, future planning, controlling, and problem-solving. Management accounting is used by organizations to plan, direct, and control operating costs in order to achieve profitability. It is widely acknowledged that management accounting practice (MAP) are critical to an organization's success (Horngren et al., 2009). One of the most famous criticisms of the MA over the most recent twenty years has been that its customary apparatuses like standard costing, change examination, planning, and cost volume benefit investigation are presently not sufficient for the present manufacturing organizations (Johnson & Kaplan, 1987). Anthony (1989) censured that a particular MA procedure is broadly utilized where there is no factual proof to demonstrate that. He also claimed that there was a need for research data on the use of MAP because data on MAP is extremely limited and almost all related data is narrative. Likewise, Drury (1998) guaranteed that further exact investigations are expected to give a definite depiction and assessment of these new frameworks and variables that impact change. The MA analysts have answered these worries with survey-based investigations of MAP. Models incorporate investigations from the UK (Drury et al., 1993; Abdel-Kader & Luther, 2006); the USA (Green & Amenkhienan, 1992); and Australia (Chenhall & Langfield-Smith, 1998a). The common findings from these reviews are that traditional MAP is not yet well known in any case, offsetting advanced strategies with guaranteed benefits. This has raised the question of whether it is premature to expect traditional MA practice to be important - as Johnson and Kaplan (1987) stated - and whether the circumstances are critical to actually embrace as late evolved methods (Chenhall & Langfield-Smith, 1998a). As well as studying the province of MAP, researchers have intended to perceive and distinguish contingent

Dhaka University Institutional Repository

elements impacting the turn of events and execution of this practice. Thusly, contingency theory (CT), which has been taken on since the middle of the 1970s, arose as one of the most involved speculations by researchers for making sense of varieties in the plan and execution of MA frameworks. These contingent elements are ordered by and large into two groups: outer and inward factors. The essential variables were both the "external environment (EE)" and company highlights like its size and willingness to embrace innovation. Early specialists began by reviewing the impact of these fundamental variables on the MA frameworks embraced (Gordon & Narayanan, 1984; Puxty & Lyall, 1989), and afterward they expanded the group of possibility-based MA research by adding a scope of new factors (Alebaishi, 1998; Anderson & Lanen, 1999, for example, organization age, accounting training, and organizational culture (OC)). The CT in Massachusetts has, nonetheless, accomplished an elevated degree of significance in all nations, and this was through countless examinations that have involved it as an exploration structure to date. Management accounting also aims to reduce production costs, allowing customers to purchase the item at a lower price. As a result, the implications of the board are enormous to consider when assembling organizations. Subsequently, management accounting is a bunch of practice and procedures pointed toward giving managers monetary data to assist them with simply deciding and keeping up with successful command over corporate assets. These incorporate the strategies and ideas important for successful preparation and alternative direction, which demonstrate picking among elective business activities and controlling through the assessment and translation of execution. However, management accounting practice are critical for a business organization because they help the firm reduce costs and gain control over its expenses in order to increase profitability.

However, accounting systems are completely dependent on for sustainable development in industrial sectors in order to measure productive capacity and assess financial performance. A "traditional financial accounting system" isn't sufficient to give this information. Hence, the executives' accounting frameworks go into the domain of unstructured appraisal systems of monetary execution. Financial performance can be characterized as an essential proportion of how well a firm can utilize resources from its essential method of business and create incomes (Mills et al., 2008). This term is also used as a general proportion of a company's overall financial performance over a given timeframe and can be used to compare firms in the same industry or to

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analyze enterprises or areas in conglomeration. The presentation estimation idea demonstrates that representatives can expand the worth of the firm by expanding the size of a company's future incomes, by speeding up the receipt of those incomes, or by making them more certain or safer (Cadbury, 2000). There are various ways of estimating monetary value; however, all actions ought to be taken in collection. A portion of the signs of monetary execution are return on value, liquidity proportions, benefit proportions, influence proportions, and market respect proportions.

The practice of management accounting in the manufacturing sector and the performance of the organization in terms of those practices is essential to measure and evaluate the applicability of management accounting in those organizations. As a result, the practice and effectiveness of management accounting in manufacturing firms are a major concern today. Businesses must continually improve in order to remain competitive in today's global market. Good management accounting practice enables the organization to continuously improve. Management accounting practice are normally expected to work on firms' presentations. As per Alleyne and Weekes-Marshall (2011), the researchers have for some time been related to giving administration answers for the inner administration motivations, particularly in the assembling area. Uyar (2010) noticed that the apparent significance of MA is driven by diminishing benefits, inflating expenses, contests, and monetary emergencies. Horngren et al. (2009) contend that assembling organizations use MA procedures like planning, change examination, and breakeven investigation to survey their activities. These strategies assist associations with arranging, directing, and controlling working expenses and accomplishing productivity. Overall, it is contended that in going with more viable creation choices that prompt expanding benefit, producers should take on appropriate MAP (Khajavi & Nazemi, 2010). As a result of these, many management accounting tools and techniques have been developed and rehearsed all over the world. Management accounting (MA) practice, according to Ittner and Larcker (2002), are various techniques extraordinarily considered for assembling organizations to help the association's framework and the MA processes. The MA practice can incorporate planning, execution assessment, and data for independent direction and vital investigations, among numerous others. According to Ittner and Larcker (2001), the essential standard of the MA has changed to an additional; better one that adds esteem than other practice as a result of the advancement of these new strategies. The writing has also demonstrated that a few practices, for example, ingestion costing and minimal costing, are not particularly preferred

Dhaka University Institutional Repository

by the majority of organizations. For instance, Dugdale and Jones (2002) focused on the fact that there is a restriction inside these costing frameworks since they don't give a precise technique for recording expenses, so it is important to be careful to pursue sound management choices.

However, most of the research conducted worldwide in relation to management accounting strategies is on manufacturing businesses, as the idea of cost and management accounting has arisen in manufacturing organizations. Scientists and scholars like Chenhall and Langfield-Smith (1998), Adler et al. (2000), Joshi (2001), Cadez (2006), and Sharkar et al. (2006) did their best to pay attention to the staff attitude of the manufacturing company concerned to identify the present status of management accounting practice, to differentiate traditional and modern management accounting practice, and to evaluate its application in various managerial perspectives like decision-making and profitability. Their efforts were successful because they played a vital role in establishing a competitive advantage for the organizations.

Currently, rapid mechanical changes in business conditions around the world play a significant role in acquiring and changing MA systems. Sunarni (2013) contends, as he did in his review, that it is critical for a company, whether it is producing or not, large, medium, or small, and whether it benefits or not, to implement changes in MAP to ensure long-term viability in the global market. There are numerous factors that influence research advancements within organizations (Alleyne & Weekes-Marshall, 2011). It is a common belief that there is a consistent pattern of assets that moves with outside climate changes, influencing the selection of appropriate MAP within any organization and such contingent changes in MAP (Otley & Berry, 1994). Concentrating on the MAP in Bangladesh represents an extraordinary test for the researcher. Past examinations on this point have introduced disheartening outcomes (Shil & Pramanik, 2013; Yeshmin & Hossan, 2011). The MAP of the nation is by and large poor, which can be credited to low cost rivalry, obliviousness of clients, extraordinary reliance of customers on help ventures, administrative provisos, and low interest in the amazing skill of proprietors and supervisors in the country (Shil et al., 2019). Sixty years after gaining independence, Bangladesh has become a nation dominated by areas of strength. As the nation approaches its brilliant celebration, it requires the MAP to fortify its assembly areas as well as upgrade their seriousness and effectiveness. In an era of globalization and data innovation, the country can only manage with significant effort without establishing the foundation of a useful manufacturing sector. Given the significance of such

Dhaka University Institutional Repository

prerequisites, the public authority has made the keeping and examining of cost accounting records compulsory for certain fabricating areas, accordingly, persuading the foundation of strong MAP in Bangladesh.

Since privatization initiatives started, the environment for manufacturing organizations in Bangladesh has been improving. The amount of foreign direct investment in the economic zone is increasing significantly. Bangladesh offers various productive advantages to attract global brands. At present, there is tremendous growth in the manufacturing sector in Bangladesh. And once the foreign management combines with the local affairs, they provide infrastructural support along with new management philosophies and styles to operate their business here. The significant shift of the economy from an agricultural to an industrial base is a signal that Bangladesh is currently on the development highway. If the country wants to export its industrial products and promote the growth of the industrial sector, the government of Bangladesh should implement new policies and regulations. However, there is worry about an absence of openness to the MA among Bangladesh manufacturing areas since there is a tight spotlight on the utilization of MAP. Past examination has recommended that MAP is a significant device through which the board can advance productivity and possibly impact execution (Lybaert, 1998; Mitchell and Reid, 2000). Because of the changing profile of the corporate sector in Bangladesh, it becomes critical to know the degree of utilization of various MAP and the innate reasons for their decisions, as well as any relevant connection between the MAP and benefits, especially financial performance.

1.2 Problem Statement / Research Gap

Management accounting is a profession that includes collaborating in administration direction, concocting and executing management systems, and giving skill in monetary disclosure and control to help the management in the detailing and execution of an association's procedure. Organizations use the MAP to survey their activities. These incorporate planning, fluctuation investigation, and breakeven assessment. These techniques assist associations with arranging, directing, and controlling working expenses and accomplishing productivity. It is perceived that MAP is critical to the progress of the association (Horngren et al., 2009). Current MAP has consolidated monetary and non-monetary procedures that expect to give critical data at both a functional and authoritative level. The rise of refined MAP, for example, “balanced score card

Dhaka University Institutional Repository

(BSC)," "activity-based costing (ABC)," and "target costing," is the consequence of developing transformations on current management practice by the present associations, for example, complete quality management, production network management, lean assembling, and "just in time" (JIT) (Ittner & Larcker, 1998; Abdel-Maksoud et al., 2005). Various aspects of business operations can be used to explain the function of cost and management accounting. The management accounting practice in various industries have five main flows, namely the costing system, budgetary control, performance evaluation, information for decision making, and strategic analysis, which act as agents that affect the manufacturing performance of firms, according to the published literature (Alleyne & Marshall, 2011, Abdel-Kader & Luther, 2006, Gichagaa, 2013, Yusheng & Chipwere, 2020, Hellen, 2018).

The industrial revolution played an important role in the development of management as a separate branch of accounting. Due to a dramatically changed industrial process, a lack of relevant information, limitations in financial accounting, and increased regulation by the SEC and DSE, especially for manufacturing organizations, the corporate environment in Bangladesh is changing. For this changing profile of the corporate sector in Bangladesh, it becomes vital to know the degree of use of various MA methods and the inborn reasons of their decisions, as well as any relevant connection among MAP and financial performance (FP), especially in manufacturing companies listed on the Dhaka Stock Exchange (DSE). Most studies in Bangladesh show the "co-existence of both traditional and advanced management accounting techniques in manufacturing organizations in Bangladesh" (Sarker et al., 2006; Mazumder & Ahmad, 2010; Yeshmin & Hossain, 2011)." Some studies have been done on the pharmaceutical industry, service industry, and financial institutions to find out the extent or use of MA techniques in the business process, like Yeshmin and Das (2009) and Yeshmin and Fowzia (2010). Again, the impacts of MA practice on effective decision-making criteria in different organizations are also studied by Yeshmin and Hossan (2011). There have been few studies on the use of activity-based costing (ABC) and responsibility accounting in Bangladeshi manufacturing organizations (Sarker & Yeshmin, 2005; Nwahaghi, 2021).

There are numerous factors that influence the progression of MAP within organizations (Alleyne & Weekes-Marshall, 2011). It is a typical conviction that there is a ceaseless pattern of assets that moves with outside climate changes, impacting the choice of the suitable MAP inside any

Dhaka University Institutional Repository

association and causing such contingently determined changes in MAP (Otley & Berry, 1980). Furthermore, without understanding the possibility approach or identifying the proper relevant elements behind such a possibility approach in planning an MA framework, the MAP loses their gravity and ruin the entire cycle, resulting in a massive whole (Shil et al., 2019). An absence of research was needed to recognize those contingent variables that affected the plan and the degree of execution of MAP in Bangladesh. An absence of examination to recognize those contingent elements that impacted the plan and the degree of execution of MAP in Bangladeshi assembling organizations consequentially, the momentum focuses on means to expand MAP' exploration and fill this hole. The achievement of the MAP by firms is driven by various contingent elements. The MAP all over the world follow the possibility system, which isn't commanded by regulation and whose practice are not normalized like financial accounting. In view of the writing audit, this review has recognized five contingent factors that might impact the degree of purpose of MAP. This finding is vital for understanding the business climate in Bangladesh because the interest in the MA data isn't that basic to the management, and consequently, they may not be that serious about the utilization of the MAP. Rather, the MA framework is for the most part planned in view of the compulsory requirements of the market, and the MA is implanted inside the financial accounting and reporting framework. Bangladesh needs greater development on the elements as viewed in this review to impart wonderful MAP. Management accountants are working most of the time to carry out the desires of owner-managers at the expense of the desires of the market. They are working as part of the rules and routines applicable to the firm.

Presently, it has become essential for makers to accumulate costing and other functional information to go with administrative choices connected with production because of the expanding worldwide competition and intricacy in the manufacturing environment. Overall, it is contended that in pursuing more viable creation choices that prompt expanding productivity, makers should embrace appropriate MAP (Khajavi & Nazemi, 2010; Uyar, 2010). Prior examination shows that MA is related to progress in manufacturing areas and is accordingly possibly having a significant effect on execution within this monetary area (Gichagaa, 2013; Yusheng & Chipwere, 2020). Consequently, manufacturing areas offer a possibly compensating area for examining MAP and investigating the elements based on their turn of events. Also, MA analysts have embraced contingency theories (CT) (Abdel-Kader & Luther, 2008) and institutional theories (IT) (Gichagaa,

Dhaka University Institutional Repository

2013) to distinguish those contingent and institutional elements having the best impact for grasping neighbourhood contrasts (between organizations) as well as public distinctions (between nations) as far as the plan and execution degree of various MA practice.

1. **Lack of Comprehensive Studies**: Many existing studies in the context of management accounting practice for listed manufacturing companies in Bangladesh have been limited in scope or have focused on a specific aspect of management accounting, such as costing or budgeting. There is a need for more comprehensive studies that cover a wide range of management accounting practice, including costing techniques, budgeting, performance evaluation, decision-making, and strategic accounting concepts, to provide a holistic understanding of the management accounting landscape within this sector.
2. **Lack of Industry-specific Focus**: While there are studies exploring the relationship between management accounting practice and financial performance in general, there is a dearth of research specifically focused on the manufacturing industry in Bangladesh. Given the significance of the manufacturing sector in the country's economy, there is a need to understand how management accounting practice is adopted and utilized within this sector and how they contribute to financial performance.
3. **Limited Examination of Internal Factors**: Internal factors, such as firm size, organizational structure, management support, technology adoption, and employee skills, are crucial in determining the extent of management accounting practice usage. However, there is a lack of in-depth investigation into these internal factors and their influence on the adoption and effectiveness of management accounting practice in the context of listed manufacturing companies in Bangladesh.
4. **Mediating Impact on MAP:** This study is going to analyze the mediating impact by using the variable Rationalized Managerial Decision (RMD). Here the independent variables are considered the MAP, and the dependent variable is financial performance of the selective manufacturing industries in Bangladesh. The mediation analysis creates more value of this study by enhancing accounting theories and practice.
5. **Relationship between subjective performance and objective performance:** The study operationalizes and validates two measures of performance, namely, subjective performance and objective performance. The study contributes to the management

accounting literature by providing evidence for association between objective and subjective measures of performance. Financial performance and non-financial performance are the criteria of measures subjective measures. On the other hand, secondary data from the annual report of the respected companies was used as objective measure of financial performance. Return on assets, return on equity, return of sales was the key components of the objective measure.

6. **Contextual Specificity**: The manufacturing sector in Bangladesh operates within a unique set of environmental, cultural, and regulatory conditions. The research gap lies in understanding how the specific characteristics of the Bangladeshi manufacturing context influence the adoption, implementation, and effectiveness of management accounting practice and subsequently impact financial performance. Existing literature primarily focuses on developed economies and may not adequately capture the nuances and challenges faced by manufacturing companies in Bangladesh.

However, The MAP significantly affects the performance of an industry, specially the manufacturing industries (Ndemewah & Hiebl, 2021), but there is as yet a far-reaching absence of the MAP for navigation and a lack of specialized abilities for upgrading the monetary execution of firms, which is a significant impediment to quantifying the financial execution of manufacturing firms in emerging nations like Bangladesh. No observational review has explored how MAP in Bangladesh assist associations with making progress through sound MAP (Shil et al., 2010). Because the vast majority of Bangladeshi firms are in the early stages, they receive regulatory assistance, and as a result, they are still preoccupied with dealing with firm objectives, for example, ensuring efficiency while keeping up with cost gravity. Considering contingency theory, this study attempts to focus on the factors that influence the use of MAP among different industries in the manufacturing sector as well as establish a conclusive relationship between financial performance and the use of MAP in manufacturing sectors in developing countries like Bangladesh. It is believed that the originality of this research will add to the significant knowledge of MAP in Asian countries, particularly Bangladesh. In light of this, a study on the level of implementation of management accounting practice and their effect on financial performance becomes a crucial area for further investigation. As a result, this research aims to gain a broad overview of the use of MAP within manufacturing sectors in Bangladesh and examine both the factors leading to their use as

Dhaka University Institutional Repository

well as their impact on performance, given the significant economic viability of the manufacturing sector and the gap in the literature. The research objectives, research questions, and research hypotheses created for this study are listed below. This pioneering study serves as a model for subsequent research in the field.

1.3 Research Questions

The main questions that propel this study are:

1. What is the current use of MAP by manufacturing companies in Bangladesh?
2. What internal contingent factors affect the extent of the use of MAP by manufacturing companies in Bangladesh?
3. What is the impact of management accounting practice on the financial performance of manufacturing companies in Bangladesh?
4. Is it possible for the manufacturing industries in Bangladesh to mediate with Rationalized Managerial Decision (RMD) in the relationship between MAP and FP?

1.4 Research Objective

The general objective of this study is to investigate the status of management accounting practice and their impact on the financial performance of manufacturing companies in Bangladesh.

Specific Objectives

i. To identify current status of management accounting practice in Bangladesh from managerial perspective.

ii. To explore the internal contingent factors that influence the extent of use of the management accounting practice in Bangladesh.

iii. To investigate the impacts of MAP on financial performance of the manufacturing companies in Bangladesh.

iv. To justify the mediating effect of RMD in the relationship between MAP and FP for the manufacturing industries in Bangladesh.

v. To operationalize the subjective measure of the FP and accessing their justification for use in place of objective measure of FP.

1.5 Motivation of the Study

According to Ittner and Larcker (2002), MAP are various strategies considered for manufacturing firms in order to help the organization's framework and the MAP. The MAP can incorporate planning, execution assessment, and data for navigation and key investigations, among numerous others. Ittner and Larcker (2001) contended that as a result of the advancement of these new strategies, the essential standards of the MA have shifted to a new, better one that adds value over other practice. The writing has likewise shown that a few practice, for example, retention costing and peripheral costing, have not been particularly preferred by most organizations. For example, Dugdale and Jones (2002) emphasized that these costing frameworks have a limitation in that they do not provide a precise strategy for recording expenses that is certain to go with sound management decisions.

Various internal and external factors aggregately pushed MA over the course of the past decades to reach its ongoing shape. Boer (2000) recognizes that there is an adjustment to the MAP with respect to time. MA analysts expanded the hypothetical space from financial aspects to social and organizational hypotheses in order to distinguish the elements influencing the variety of MAP among organizations. They began utilizing numerous hypothetical methodologies, e.g., contingency theory (CT), financial hypothesis, institutional hypothesis, political economy, etc. (Scapens, 2006). The O'Connor et al. (2004) study, for instance, embraced both institutional and organization hypotheses for deciding the elements impacting the reception of MAP by expressed claimed organizations in China. Abdel Kader and Luther's (2007) book concentrates on embracing the CT to make sense of how manufacturing organizations in the UK executed various MAP. Ibrahim's study (2007) embraced “new institutional sociology theory (NSI)” in Syria by looking over the degree to which state-possessed manufacturing organizations apply standard costing frameworks and the elements impacting their execution. Nonetheless, because CT is widely used, it was used in this study to identify the contingent variables that have the greatest impact on the execution of MAP.

In Bangladesh, which is considered one of the developing economies, three incentives encouraged the researcher to conduct this type of research. Firstly, due to a dramatically changed industrial process, a lack of relevant information, limitations in financial accounting, and increased regulation by the SEC and DSE, especially for manufacturing organizations, the corporate environment in Bangladesh is changing. It is crucial to understand the extent to which various management accounting practice are used in Bangladesh's corporate sector, as well as the underlying motivations behind those decisions, to determine whether there is any meaningful correlation between those practice and financial performance, particularly in manufacturing companies listed on the DSE. Given their substantial contribution, particularly in the context of developing nations, it is possible that the manufacturing sector will not use MAP and will not fully capitalize on any opportunities that improved accounting information may present. Additionally, despite extensive research being done in many developed and LDC countries, there have been no prior studies that have looked at the level of implementation or the state of MAP in Bangladesh's manufacturing sector. Most of the studies done in Bangladesh basically focus on the MAP as a narrower concept (i.e., either qualitative or quantitative), while a few studies focus on the traditional or advanced MAP. Moreover, there is limited research studying the influences of contingent factors on this use. Based on the foregoing background and in line with many researchers in various developed countries and LDCs, the researcher has adopted contingency theory (CT) to identify the contingent factors that affect the extent of MAP in Bangladesh. As will be discussed later, financial performance has been analyzed based on factors of MAP such as costing systems, budgeting, performance evaluation, and information for pricing and decision-making, and strategic analysis. Those factors were used as independent variables, and financial performance was used as a dependent variable. The empirical study used several statistical tools, including the structural equation model (SEM), which estimates the latent variable financial performance using the observed variable, known as an independent variable. The researcher had the chance to discover and develop new contingent factors that were directly connected to the context of Bangladesh's economy and the development of MAP within that context, which presented opportunities to make a significant and original contribution to knowledge

1.6 Contribution of the Study

1.6.1 Contribution on Theory

The contingency theory was used to analyze management accounting practice in this study. In that case, the feasibility of a contingency theory (CT) of management accounting started to be explored during the 1970s, trying to make sense of the assortments of MAP that were obvious around then. It relied heavily on the contingency theory of authoritative construction developed over the previous twenty years to classify which types of organizational design were generally appropriate for explicit conditions. Much of the time, the autonomous factors used to make sense of organizational construction were moved wholesale into the arising hypothesis of the MAP to make sense of the plan and utilization of management accounting frameworks. Contingency theory (CT) is sustained in various dimensions of MAP such as costing systems, budgeting, strategic decision-making, evaluation processes, and others, in which factors have identical contributions to determining the financial performance of an organization.

1.6.2 Contribution of Methods

In this study financial performance has been analysed based on factors of MAP such as costing system, budgeting, strategic, decision making, and evaluation process. Those factors used as independent variables and financial performance have been used as dependent variable. The empirical study considered several statistical tools where this study applied structural equation model (SEM) where the latent variable financial performance has estimated through the observed variable known as independent variable. At that time, observed variable takes several scales which is examined by the factor analysis to estimate the weight of observed variable. This study also applied the subjective and objective measure of the financial performance and mediation effect also estimated.

1.6.3 Contribution to Practice and Implication

This research implies practice in a variety of contexts, including academic fields, manufacturing company management processes, industrial production strategies, and other contributions to the academic field where the academic stakeholders can accomplish new knowledge and methodology in this field. The internal bodies of manufacturing companies can enhance their productivity through knowledge spillovers and enhance their efficiency level in production. Strategic

development and the decision-making process should be another focus of this research, using the practice of contingency theory. The MAP can precede economies of scale in production by considering consumer and producer behaviour. The firms concentrate on reducing production costs and enhancing maximum profit, while at the same time the consumer wants to maximize their utility with respect to budget constraints. In that case, MAP have a significant role to play in maintaining the supply and demand chain in the market.

In addition, this study will have helpful ramifications for theory and practice. Concerning expected ramifications for theory, the study will grow the current MA in existing literature in two fundamental ways. First, the review will provide new experimental evidence on the use of MAP. Second, the review will contribute an additional focus in the new setting of the Bangladesh manufacturing sector in terms of what contingent factors influence the degree of MAP use.

Finally, the exploration test for a connection between the utilization of MAP and the presentation with regards to the Bangladeshi manufacturing area. The focus on Bangladesh is particularly significant because exploration in MAP and manufacturing industries is extremely limited in this country and in developing countries more broadly. Benefits for training will incorporate the following:

i. The making of mindfulness among Board of Director (BOD) and managerial body of the significance of the MA for of further developing execution and keeping up with gravity in the business center.
ii. The arrangement of results that might help policymakers, for example, the degree of purpose of MAP among manufacturing area and variables that influence the utilization of MAP, that might assurance that future approach choices made by the Bangladesh government, financial establishments, and different gatherings with an interest in manufacturing sectors.

Whatever, this research has made an overall significant contribution in the following sections:

i. Contributions to the academic field where the academic stakeholders can attain new knowledge and methodology in this field.

ii. The stakeholders of manufacturing companies can enhance their productivity through the knowledge spillovers and enhance their efficiency level in production.
iii. Strategic development should be another concentration in this research through the practice of contingency theory.

1.7 Limitation of the Study

While conducting the research, the researcher faced couple of problems that may limit the applicability of the research findings. Some of such limitations are mentioned below on which readers' discretion is expected:

i. The researchers collect data from CFO (Chief Financial Officer), CS (Company Secretary) & Head of Accounts only as they are authorized person to deal with the use of management accounting practice in their respective organization.
ii. The study of extent of management accounting practice covers only one time period. Due to the absence of any baseline survey in the field of management accounting practice in Bangladesh, the study fails to cover two different time periods for studying any potential developments/changes in the area.
iii. Convenient sampling is applied for selecting sample companies for the survey.
iv. The survey is based on manufacturing companies from Dhaka and Chittagong region only.
v. Abundance of missing figure and respondents' unwillingness to provide some information limits the sample size.
vi. Sample size (78 respondents from 150 firms) is small.
vii. Data collection period stretches a long period of more than one year.

1.8 Ethical Approval

Hereby, the author consciously assures that for the manuscript, impact of management accounting practice on financial performance: evidence from listed manufacturing companies in Bangladesh the following is fulfilled:

i. This is research work, which is prepared by author oneself.

ii. The title of this research is originally defined; there is no previous study in that field.
iii. This research is not considered or submitted in any other degree/board/or conferences.
iv. The result of this research is estimated by author oneself and this research is completed in suitable method.
v. The paper accurately credits the significant assistance of Supervisor and co-Supervisor.
vi. The paper accurately credits the significant assistance of the respondents and other stakeholders.
vii. All the sources of data and other relevant study, especially citation, is correctly mentioned and defined.
viii. The author of this research is free from any bias in the meantime of data collection, data coding, data entry, data representation and data analysis.
ix. In the field survey through questionnaire and interview, the authors are taken permission from the individual respondent, group of society, board of management, industrial organization and legal authorities.

However, the researcher has agreed with those statements and ethical statement has proceeded with accuracy ensured by the researcher.

1.9 Conclusion

The nature of management accounting, however, is dependent on organizational variables and rapidly changing decision-making requirements. The current study merely discusses the state of some organizations' management accounting practice and tries to identify the root causes. The results, therefore, shouldn't be applied generally. All these restrictions should be taken into account when reading the study's conclusions.

Chapter 2

Theoretical Framework and Theoretical Review

2.1 Introduction

Management accounting has grown in prominence as a field of study among both professionals and academicians due to the importance of the information it provides to a company's ability to survive as well as grow in a competitive industry. Furthermore, research shows that businesses with well-planned and well-developed management accounting systems have a competitive advantage. This chapter was conducted on the relevant theories which are needed to explain for developing a framework of mathematical model.

2.2 Related Theory for Management Accounting Research

Malmi and Granlund (2009) in their discussion of how to conduct research on management accounting, draw on central issues and problems in the sociology and philosophy of science, like ontology, epistemology, methodology, paradigm, and so on. Management accounting research is inherently argumentative that leads to the existence of competing schools of thought. For example: Zimmerman (2001) advocates for an economic-based functionalist approach to management accounting. Authors claimed that the empirical management accounting literature was unable to generate a significant cumulative body of knowledge because of a lack of an inductive approach, researcher incentives, the use of non-economics-based frameworks, a lack of theories that could be empirically tested, and an emphasis on decision making. The empirical management accounting research conducted by Zimmerman (2001), according to Luft and Shields (2002), is flawed due to its flawed premises and potentially misleading recommendations for future study. Different methodologies, they argue, are more applicable to management accounting in the real world.

Zimmerman (2001) argues that management accounting theory is important for all different people who have to make decisions within an organization. One of the most important measures of a theory's success in his eyes is how applicable it is in practice. Furthermore, advocates of positive accounting theory agree that a practical theory is necessary (Malmi & Granlund, 2019). Even though management accounting is a valuable field of study for businesses, researchers in the field

are often criticized for failing to have an impact on the field's actual practice. Separation of "theory and practice" identified. Despite this, as Ryan and Scapens (2002, p. 70) found out, “many of the textbook techniques appeared to be little used in practice.” Scapens (2006) contends that the gap exists because these publications are normative and founded in the neoclassical economics tradition, neither of which offers a credible explanation for the observed practice of management accounting.

Management accounting has traditionally been studied and taught from a neo-classical economic perspective (Scapens, 2006a). In this economic model, everything is based on the assumption that people want to maximize their profits when making decisions, and economic analysis is centered on identifying and minimizing factors that have the smallest effect on this objective. As a result, many statistical techniques were created, such as cost-volume-profit analysis, learning curves, and models for examining variance. Economic theory, according to Scapens and Arnold (1986), contributed greatly to the growth of management accounting all over the world. Shields (1997) did a literature review and found that economic theory was still the backbone of most management accounting studies. While economic approaches may propose management accounting techniques, Burns and Scapens (2000) argue that this does not tell us anything about how or why these methods are actually used in practice.

Forcing academics to recognize the importance of adjusting to changing market conditions, technological advances, workplace and norms. The “Relevance Lost Crisis” paved the way for the incorporation of social theory into accounting research (Hopper et al, 2001). As a result of these changes, new research paradigms in consequently, both critical and interpretative management accounting developed. Essentially, interpretive research is an effort to comprehend and understand the social world. It posits that reality is constructed by social actors and that knowledge is founded on the unique perspectives of isolated individuals. According to Chua (1986), management accounting is a social practice because accounting theory attempts to understand and explain human behavior.

Hopper and Powell's (1985) interpretation of the paradigm of radical theories places critical accounting research midway between radical structuralism (the view that social structure shapes society) and radical humanism (the belief that society is shaped by social actors). According to

Ryan et al., the critical theory school established by Habermas and his German colleagues is grounded in the writings of Hegel and Marx. Critical management accounting can learn from Foucault, according to the work of Wanderley and Cullen (2012).

2.3 Management Accounting Research – Mainstream versus Alternative Approaches

Management accounting research is categorized by its variety of methodologies, which includes interpretive, critical, traditional functionalist and positivist research. Surveys, case studies, fieldwork, etc., are typical research methodologies. Economic theory, contingency theory, alternative theories like Foucault's theory, structuration theory, institutional theory, actor network theory, and labor process theory are all examples of traditional positivist theories. So, management accounting is not a single, unified field of study but rather one with multiple schools of thought.

There are two main types of research in management accounting: mainstream research and alternative research. The research by Wanderley and Cullen (2012) served as a thorough overview of the field.

2.3.1 Mainstream Approaches for Studying Management Accounting

According to the author, research is an act of intellectual discovery that can drastically alter our perception of the universe (Scapens, 2002). This is why research in management accounting places a premium on identifying and disseminating effective approaches to common management accounting challenges. Some academics have classified management accounting research according to philosophical topics like ontology, epistemology, and methodology to make it easier to conduct and evaluate. According to Hopper and Powell's (1985) subjective-objective perspective, management accounting research can be broken down into several distinct subfields. They further improved the accounting research categorization scheme of Burrell and Morgan (1979). The foundations of this framework include (a) the ontology, epistemology, human nature, and methodology of the social sciences, and (b) the character of society in terms of regulation and radical change.

Ontology is linked with the nature of reality. From an objective ontology, reality is assumed to exist independently of human cognition, while from a subjective ontology, reality is viewed as an

intangible mental construction (Johnson et al., 2006; Kakkuri-Knuuttila et al., 2008). In other words, **epistemology** seeks to understand what knowledge is and how it can be acquired and disseminated. According to philosophers Gill and Johnson, epistemology is the study of the standards by which we evaluate what qualifies as justified or true knowledge (2002). It is assumed in the objectivist epistemological stance that there is a theory-agnostic language of observation. This means the world can be accessed in an unbiased manner. However, the subjectivist viewpoint denies the viability of an objective stance. Understanding the social world, according to this view, requires first learning about the topic at hand (Hopper & Powell, 1985; Chua, 1986). The relationship between humans and their environments is foundational to many common assumptions about humanity (Hopper & Powell, 1985). There are two main schools of thought when it comes to figuring out how to explain human behavior: the deterministic (eklaren/objectivism) view, which likens people to mindless objects governed by external forces, and the intersubjective (verstehen/subjectivism) view, which sees a person as an autonomous agent Johnson et al., 2006).

There is a direct relationship between these three groups of assumptions and the approach taken. Knowledge is obtained through observation, so a positivistic approach is warranted, as pointed out by Ryan and Scapens (2002). On the other hand, if the importance of people's individual experiences and the construction of a social world is emphasized, then understanding should be acquired through interpretation rather than observation (Hopper & Powell, 1985; Chua, 1986).

The social context is a second dimension in Burrell and Morgan's (1979) model. Researchers can examine society from a variety of angles, which are discussed along this axis. Sociologists look to "regulation" and the establishment of order and stability to explain why societies have a tendency to hold together. However, scientists have a natural interest in issues of social justice, such as poverty, conflict, and the unequal distribution of power. As a result, there is concern among scientists about the prospect of "radical changes" (Hopper & Powell, 1985; Burrell & Morgan, 1979).

Using both dimensions, Burrell and Morgan (1979) arrived at four distinct worldviews: functionalism, interpretivism, radical humanism, and radical structuralism. Burrell and Morgan, categorized them into three distinct types of management accounting studies: (a) traditional

studies, (b) alternative studies, and (c) critical studies (see figure 1) to wit: (Chua, 1986; Baker & Bettner, 1997)

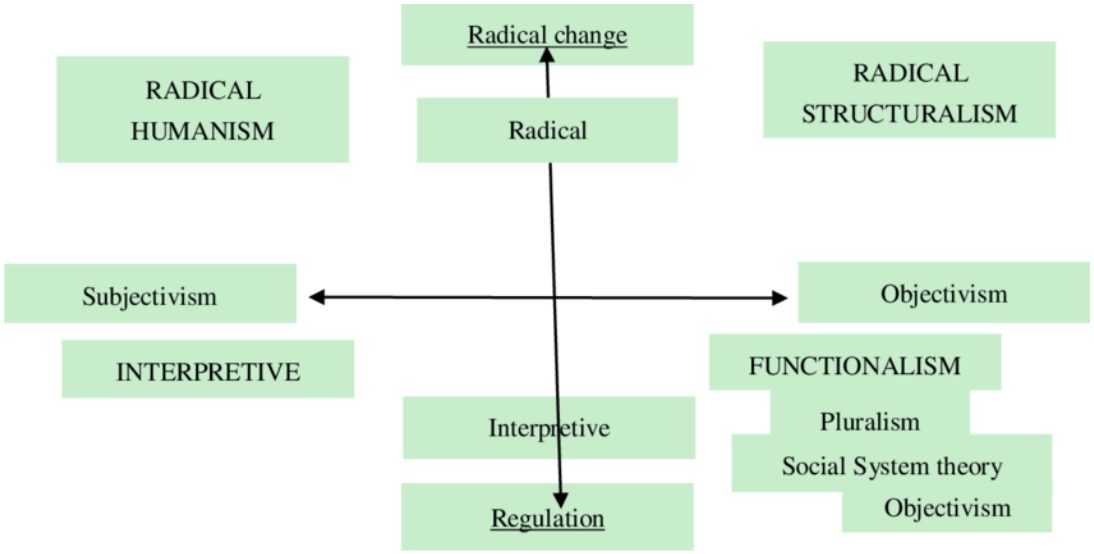

Figure 2.1: Management Accounting Research Taxonomy

Source: Ryan and Scapens (2002, p. 40)

The primary focus of mainstream research in this field is on the practical applications of management accounting. Positivist research is characterized by its use of empirical observation and its emphasis on a neutral, dispassionate view of the world and human behavior (Chua, 1986; Tuttle & Dillard, 2007). Therefore, instrumentalist and positivist perspectives, which are defined by an ontological belief about a generalizable universe waiting to be discovered, form the basis of the philosophical assumptions of mainstream management accounting study (Laughlin, 1995; Baker & Bettner, 1997).

So, the study of management accounting has shifted its focus to the functionalist paradigm. Neoclassical economics (New Institutional Economics) and organizational theory form theoretical foundation (Wickramasinghe & Alawattage, 2007). Organizational theory can provide light on the dynamic between management accounting systems and external and internal elements, which can be thought of as a collection of calculative procedures that enable decision-makers in optimizing their usefulness. One can trace the roots of the three functionalist theories of management

accounting back to either neoclassical economics or organizational theory: (a) the transaction cost theory, (b) the agency theory, and (c) the contingency theory.

According to the **transaction cost theory** of management accounting, the key to achieving economies and subsequently efficiency remains not in market transactions but in the careful coordination of managers within organizations (Coase, 1998). Management accounting's goal is to lessen the financial burden of such executive collaboration.

Since its inception in the 1970s, the idea of **agency theory** has been broadly implemented in the management accounting discipline (Kelly & Pratt, 1994). It has its roots in economic theory and is central to the established paradigm of accounting. The principals or higher-ups in an organization and the agents in an organization are said to have a contractual agreement, according to the agency theory. Even though Jensen and Meckling state that principals (owners) and agents (management) are both assumed to be economically rational people acting in their own self-interest, these two groups may have vastly different preferences, worldviews, and accumulated knowledge. Baiman's (1990) agent is a slacker who doesn't want to put in any effort and is afraid of taking chances. According to Rutherford (2003) “the role of management accounting is to resolve the problems of divergent interests between agents and principals by developing the models of performance evaluation, management control, and decision making.” The contributions of agency theory are particularly useful for improving the modeling capabilities of management accounting. Through the lens of Agency Theory, Christensen (1981) made clear that budgeting and other managerial accounting communication tools are inextricably linked to agency models. It is demonstrated that it is not always beneficial to provide the agent with more information because the agent may use the information to avoid responsibility. Given that moral hazard relationships allow for inter-temporal risk sharing, Rogerson (1985) proposes a model that connects memory (in repeated games) with preferences. Overuse of a resource leads to inefficiency, therefore Miller and Buckman (1987) investigate and corroborate Zimmerman's (1979) argument that fixed cost allocations are adequate surrogates for the opportunity costs of using service departments. Antle and Demski's (1988) theoretical model of pay packages is grounded in agency theory. The model proposed by Kerke et al. (1988) shows that buffer capacity is necessary to handle peak loads brought on by unpredictability in order arrival and processing time. Despite its usefulness in furthering the field of management accounting, agency theory is not

without its flaws. Because it assumes a single owner, rather than a group of owners and debt holders, the principal-agent model often disregards the impact of capital markets (Baiman, 1990).

Contingency theory approach was studied at the outset of the 1950s as a reaction to earlier theories of management that, due to diversity, emphasized on the organization, i.e. "one best way." Szilagyi and Wallace (1980) provide a summary of the original work by Kast and Rosenzweig (1972), the contingency approach seeks to comprehend the connections between the various parts of an organization and their external contexts. It places an emphasis on the dynamic and complex nature of organizations and tries to decipher and comprehend their behavior in different settings.

Contingency theory shed light on organizational behavior through a concise explanation of the ways in which external factors, including technological developments, cultural norms, and the economic climate; shape the form and operation of businesses. As Under the umbrella of contingency theory, it is assumed that not all organizational structures are created equal. Instead, productivity is a function of how well an organization's various informational, technological, physical, and organizational components work together.

The open system approach is the theoretical foundation for contingency theory, which examines an organization and its constituent parts in light of their context. Since management accounting is an attempt to harmonize internal and external factors, it is best viewed through the perspective of contingency theory (Groot & Lukka, 2000). The end result will be generalizations and suggestions for best practice in management accounting in light of the interplay of external, internal, and accounting elements. If current methods do not meet the requirements of an ever-evolving environment, then new methods must be designed to do so.

The fundamental principle of an interpretive method is the recognition that social practice, such as management accounting, are not coincidental occurrences. Therefore, the foundation of interpretive studies is the idea that accounting practice can be changed by different groups (Kakkuri-Knuuttila et al., 2008). This sort of research is done in the discipline of management accounting with the overarching objective of explaining and shedding light on management accounting as a social practice. It is required to look into the here and now to carry out an interpretive analysis in management accounting while also taking into account the institutional,

political, economic, and social environments in which they exist (Ryan et al., 2002). Hopper and Powell (1985) argue that this is crucial because "by using interpretive research methods, to study how accounting meanings are socially generated and sustained, a better understanding of accounting will be obtained." Management accounting can also be approached from an interpretive perspective, as discussed by Baxter and Chua (2003).

According to critical researchers, society is made up of competing forces that are maintained by hierarchical structures, ultimately resulting in widespread inequality and a sense of isolation. Researchers with a critical lens seek to better understand the social and economic world so that they can critique it and advocate for positive change (Hopper & Powell, 1985). Critical researchers have argued that one weakness of interpretive research is that it does not include a plan for enacting social change. According to Baker and Bettner (1997), the critical study is distinguished from the interpretive study by its focus on the research's potential political and social implications. Management accounting incorporates a few critical approaches, including those of Foucault, Braverman, and Habermas (Ryan et al., 2002; Chua, 2006).

Table 2.1: The Main Assumptions of Mainstream, Interpretive and Critical Research

Mainstream Accounting Research	**a)**	**Beliefs about knowledge** The two pillars of knowledge, theory and observation, stand on their own. In order to make broad inferences from collected data, quantitative approaches should be used.
	b)	**Beliefs about physical and social reality** The world of empirical fact exists independently of the observer (and the researcher). People are inanimate objects who maximize their own utility. Society and institutions remain relatively steady when sound management control systems are in place.
	c)	**Relationship between accounting theory and practice** The focus of accounting is on processes, not results. It is possible for a theory to be value-free, and in this case, preexisting institutional frameworks are assumed.

Interpretive Accounting Research	**a) Beliefs about knowledge** Human intentions can be explained with the help of theory. A theory's viability is assessed in terms of its internal coherence, its openness to individual interpretation, and its plausibility to the average person. Research methods such as participant observation, case studies, and ethnographies are best suited to this type of inquiry because they allow researchers to observe actors in their natural habitats. **b) Beliefs about physical and social reality** Human interactions create and objectify reality as a social constructAll human activities have significance and intent when seen in the larger social and historical context. Furthermore, a shared set of beliefs and values serves as a mediator in times of conflict and supports the assumption of social order. **c) Relationship between accounting theory and practice** Accounting theory attempts to do two things: explain behavior and investigate the mechanisms by which social order is created and maintained.
Critical Accounting Research	**a) Beliefs about knowledge** Judging theories is a dynamic process that is constrained by time and space. When conducting critical research, the best approaches are those that draw on history, ethnography, and case studies. **b) Beliefs about physical and social reality** The objective nature of reality in the world can be verified through empirical observation, but this reality is transformed and perpetuated through the application of various perspectives. Human potential is widely acknowledged, but it must be scrutinized due to the prevalence of false consciousness and ideologies to which it owes its legitimacy.It is also assumed that social injustice, which limits individual freedom, is a major contributor to the prevalence of conflict in society. **c) Relationship between accounting theory and practice**

	Recognizing and eliminating dominant and ideological practice relies heavily on theory.

Source: Adapted from Chua (1986) and Ryan et al. (2002).

2.3.2 Alternative Approaches in Management Accounting Research

The article describes management accounting as "a highly situated phenomenon" (Baxter & Chua 2003). Many factors limit management accounting, as described by Baxter and Chua (2003). These include (a) circumstances specific to a given time and place, (b) cultural norms and values, (c) the prevailing logics in a given organizational context, and (d) the personal routines of those who play a role in carrying out management accounting tasks within that context. It has been argued that the primary flaw of traditional studies of management accounting is that they do not account for the aforementioned limitations when investigating management accounting phenomena (Lukka & Mouritsen 2002). According to Ryan et al. (2002) positivist theories in management accounting "may be useful for predicting general trends, but they will not be helpful in explaining individual behavior; nor are they likely to be useful MAP to individual managers or firms about their own economic behavior."

In response to the criticisms leveled at traditional management accounting based on neoclassical economics, several researchers in the field have developed novel approaches. Over the past 35 years, especially in the UK, the use of these options has skyrocketed (Hopper et al., 2001; Ryan et al., 2002). To investigate this expanding body of literature, Baxter and Chua (2003) combed through the issues of Accounting, Organizations, and Society (AOS) from 1976 to 1999 in search of studies on management accounting. They identified seven separate research foci related to alternative management accounting techniques. What follows is one possible synthesis of such a flow:

1. Non-rational design school: The Non-rational design school, the earlier one in the field of alternative management accounting, focuses on management accounting's ability to aid organizations in dealing with future uncertainty and in achieving their stated goals via the implementation of well-planned experiments. This is often accomplished in ways that run counter to conventional notions of economic sanity, as explain by Baxter & Chua (2006). As a whole, this

perspective raises doubts about the rationality of business choice. However, Baxter and Chua (2003) pointed out, “the non-rational design school help us to appreciate the problematic construction of management accounting information systems and their constitutive/constraining role in organizational sense-making,” while the latter is not accurate.

2. Naturalistic Approach: The strategy adopted here is geared toward the commonplace application of management accounting. Management accounting, according to those who favor naturalistic theories, also places an emphasis on the social construction of reality. One of the theoretical foundations of this approach is the interpretive theory of knowledge construction. Because of this, it disagreed with positivism's central thesis that expertise can be measured in objective terms (Baxter & Chua, 2006). Baxter and Chua (2003) note that “we learn that management accounting technologies are enacted quite differently from one organization to another; conveying local values, meanings, and nuances.”

3. The Radical Alternative: References to critical theory (Laughlin, 1987) and the theory of the production process are incorporated here (see, Hopper & Armstrong, 1991). The ultimate objective of this approach is to establish a connection between management accounting research and the broader structural issues facing capitalist economies. According to Baxter and Chua, "the politics of emancipation serves as a unifying and differentiating theme throughout the research conducted under this banner" (2006, p. 49). Insights from disruptive studies can serve as a launching pad for structural and institutional changes.

4. Institutional Theory: Management accounting transformation can benefit from insights into organizational change provided by various forms of institutional theory. This encompassing version of institutional theory incorporates the New Institutional Economics (NIE) and the New Institutional Sociology (NIS), as well as the more conventional Traditional Institutional Economics (TEI) (OIE).

Organizations can gain legitimacy and improve their chances of survival by studying NIE, which consists of the external institutions in their environment (economic, social, and political) (DiMaggio & Powell, 1991). While NIE does provide some insight into the external social

institutions that may be influencing management accounting practice, it does not reveal what is happening on the inside of individual businesses, as noted by Scapens (2006).

The OIE is worried about things like the effect of organizational pressure when it comes to management accounting. Scapens (2006b) contends that by connecting NIE and NIS to the classical economic theory that has impacted management accounting research through the classical paradigm of rationality, OIE recognizes that organizational institutions can influence actors' behavior. Using an adaptation of OIE theory, Burns and Scapens (2000) created a framework for studying management accounting change with a focus on the building of enduring norms and practice. When evaluating management accounting procedures, Scapens (1994) suggests turning to institutional theory rather than neoclassical economics. Management accounting practice reflects both macro and micro levels of institutionalization, which he highlights and argues are best understood as institutionalized routines. Barley and Tolbert (1997) argue that one of institutional theory's flaws is that it doesn't show how people's actions feed back into existing institutions.

5. Structuration Theory: Structuration theory, developed by Giddens (1984) and Stones (2005), hinges on a dichotomy between people's freedom of choice and the constraints imposed by social institutions (rules and routines). Giddens assumes this by positing a dichotomy between the "action realm" and the "institutional realm," with the latter representing the triad of signification, legitimation, and dominance (power). And the "realm of action," which concerns the concrete plans that individuals, things, and events actually implement and how they are influenced by the institutional sphere in terms of information transfer and authority. And how to control behavior through the use of various interpretive schemes, tools, and social conventions.

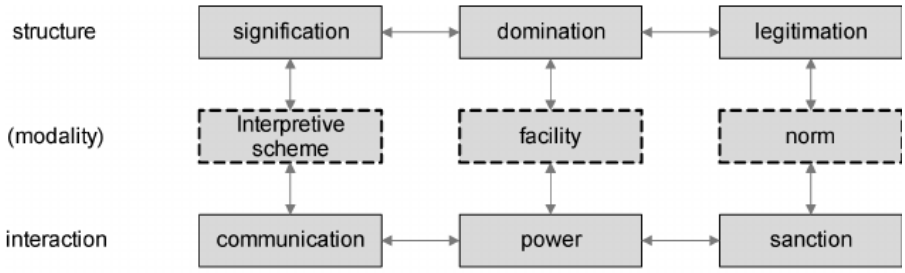

Figure 2.2: Giddens Model of Structuration

Together, these two components signification, as a cognitive dimension, and structures, as semantic rules enabled actors to communicate with one another and draw on a common body of knowledge to create meaning. This term has a specific meaning in the field of management accounting, where it refers to the established protocols for data collection, analysis, and dissemination (Macintosh & Scapens, 1991).

Structures in the domination dimension limit access to resources while fostering cooperation among actors to guarantee success. Allocative resources (artifacts) deal with physical goods or even knowledge, while authoritative resources (dominance over other actors, as seen through hierarchies) are controlled through the exercise of power (Macintosh & Scapens, 1991). When it comes to management accounting, innovation may be sluggish because of limited access to resources and a lack of authority among subordinate actors. Using the rules of conduct, agents can be directed in their interactions, and good or bad behavior can be rewarded or punished accordingly along the legitimation axis (Macintosh and Scapens, 1991). In this context, management accounting serves as a system that entices agents to take responsibility for their actions and then displays the agents' responses to the established standards of behavior.

6. Foucauldian Approach: French philosopher Michael Foucault provides the theoretical foundation for this method (Foucault, 1972). The evolution of management accounting over time is of particular importance here. The power dynamics inherent in management accounting are also taken into account by this method. According to Baxter and Chua (2006), researchers in the field of management accounting who embrace Foucault's methodology attempt to understand the development of management accounting truths.

7. Latourian Approach: Bruno Latour's writings serve as the foundation for this theory (Latour, 1987; 1993). Actor-network theory, developed in part by Latour, is a central framework in the sociology of technology. According to this theory, the interdependence of all actors (human and otherwise) is what gives them their distinctive forms. Management accounting numbers are “fabrications or inscriptions” built to take on the appearance of "facts," Baxter and Chua (2003, p. 102) write in their conclusion for actor-network theory.

Challenges, both internal and external, must be considered before MA system design can begin. It is crucial to have a firm grasp of such considerations to design effective MA systems that can adapt to the various management requirements of organizations.

However, on the basis on discussion, the most common MA framework is contingency theory (CT). CT was used to learn more about the factors that affect the degree to which MAP is implemented, building on the work of some academics (e.g., Oliver, 1991; Chenhall, 2003). CT was used to explore the effect of virtually all explanatory variables on the study's dependent variables. The development of contingency theories and their subsequent application to areas like organizational studies owe a great deal to sociological functionalist theories of organizational structure. Several authors, including Reid and Smith (2000), Chenhall (2003) use a structural approach to organizational theory. It was assumed in these studies that factors such as technological progress, the character and breadth of the workplace, and the scale of the organization all influenced the design of businesses. Even today, there are some credible sources that insist contingency theory is the primary theoretical foundation for the field of management accounting (Fisher, 1995; Cadez & Guilding, 2008).

2.4 Management Accounting Research: Gap between Theory & Practice

Since Johnson and Kaplan's seminal article "Relevance Lost: The Rise and Fall of Management Accounting," many have critiqued and debated management accounting systems that employed financial information to oversee production processes but failed to adapt to the growing needs of managers (1987). Since then, more research has been done to investigate the causes of the divide between academic research and real-world application (Modell, 2014; Tucker & Parker, 2014). By doing so, they admitted that accounting and management accounting studies were losing their societal value and called for action to reverse the trend.

It could be argued that there is little scholarly debate over whether management accounting research has lost relevance and impact. Rather, it seems to be generally accepted that this is already happening and will continue to do so. Very small contributions have endeavored to empirically research whether there might be a disconnect between theory and practice. For example, Tucker and Parker (2014) have used statistical methods to show that management accounting scholars

believe their work is becoming less relevant to the field. Yet they emphasize that their study is aimed at professors and higher. As a result, it fails to consider the viewpoint of actual experts, which is essential for establishing a real gap between theory and practice. Tucker and Schaltegger (2016) compare the perspectives of Australian and German accounting professionals on the discrepancy between theory and practice to take a practitioner-focused approach. The authors show that two of the biggest obstacles preventing management accounting research from having a greater impact are the topics' lack of importance and the challenges associated with presenting findings. Van Helden and Northcott (2010) analyze whether the objectives of public sector MAP are geared at informing practice by looking at studies that have been published in international accounting journals. Their research basically backs up the notion that there is a low level of concern for practical concerns, and that even when practical implications are recognized and discussed, it does not result in the creation of concrete recommendations that can be used in practice.

Most of the existing literature focuses on the factors that have led to management accounting's decline as a field of study. One of the most crucial, according to some, is the investigation's subject's inconsistency. The terminology appears to be confusing for management accounting students, claim Shapiro, Kirkman, and Courtney (2007). So, they avoid exploring phenomena that would be of interest to scientists and engineers. Many specialists concur with this conclusion. Ahrens and Chapman's (2007) and Seal's (2012) papers are used by Modell (2014) to show how management accounting academics are more concerned in creating sophisticated theoretical contributions than in examining issues that are practical and technical for practitioners. The lack of technical depth in management accounting, according to Mitchell (2002), is a direct result of academia's overemphasis on the social aspects of the discipline. This accentuation on the cultural parts of the MA frameworks, as per Malmi and Granlund (2009), results from a penchant to decipher the pre-embraced speculations instead of the accounting peculiarities as a reason for figuring out what may be of interest and, thusly, what ought to direct research.

Management accounting studies have shown that the field has lost ground in part because academics can't effectively convey their findings to practitioners; this problem exists even before translation (Shapiro et al., 2007). As Tucker and Parker (2014) point out, this happens whenever academics don't communicate their findings in a way that can be easily understood by

professionals in the field, or when they don't make their contributions to the field widely available. According to Inanga and Schneider (2005), communication problems start well before the time it takes to prepare a journal paper. They emphasize that communication gaps between academics and between academics and practitioners are particularly detrimental to the production of pertinent, or impactful, research. Scientists struggle to communicate their findings to practitioners and hold their interest despite being aware of the communication gap (Bromwich & Scapens, 2016). Accounting and management accountants often use quantitative and statistical methods to analyze and interpret data, but many practitioners aren't familiar with them (Chalmers & Wright, 2011). As a result, practitioners with a technical or practical education may find management accounting research too abstract to be useful (ter Bogt & van Helden, 2012; Tucker & Schaltegger, 2016). The shift in management accounting research, according to Mitchell (2002, p. 282), has created "semantic and syntactical obstacles" between academics and practitioners, who lack the theoretical background necessary to properly understand the former's work. Hopwood (2008) suggests that researchers develop marketing and communication skills to successfully connect with the world of practice, which subtly accentuates the communication divide.

However, a lack of collaboration in the subject of management accounting between researchers and practitioners has been cited as a contributing factor to the decline in importance of previous studies. Collaboration is more than just talking to someone; it's forming a relationship with the end goal of working together to gather data and figure out what it means. It has been emphasized in the literature that the practical significance of management accounting studies would be diminished without the participation of practitioners in the research procedure. With regards to making research more appealing to practitioners, Mitchell (2002, p. 286) states emphatically: “Academics can improve the attractiveness of their research by working more closely with them throughout the research process.” Involving the research expert can make it more relevant to real-world problems. This is not to say that researchers should stop being autonomous and critical thinkers during their work (Parker et al., 2011). Instead, they should start having conversations with industry and regulatory authorities as well as practitioners to produce useful research findings (Hopwood, 2007; 2008); however, they must be careful to avoid falling into the "consultancy trap" as described by Al-Htaybat and von Alberti-Alhsaan (2013). Because of the communicative gap, literature has noted that the concept of co-production of knowledge is challenging to put into

practice. However, this lack of collaboration between researchers and practitioners can be seen as one of the reasons why management accounting research has become less relevant. The fact that practitioners and academics don't share a common language makes it difficult for them to work together on a consistent basis. Additionally, practitioners aren't accustomed to using the instruments, processes, and procedures required to do academic research in the discipline of management accounting (Chalmers & Wright, 2011).

This decline in importance may be attributable to the study process itself, including the theoretical frameworks and statistical analyses used to investigate management accounting systems and their consequences. Research into management accounting began in earnest in the 1980s, when practitioners and academics alike recognized a gap between the two (Scapens, 2006). Researchers prefer to examine management accounting in a vacuum, apart from its operational context, rather than build sophisticated mathematical models to explain variations in management accounting methods; this theory posits (Scapens, 2006). Similar findings have been reported elsewhere (Hopwood, 1983). Therefore, in the 1990s, qualitative approaches became more often used to address this concern. In particular, it was shown that case studies are effective in ensuring a comprehensive examination of management accounting methods and their ramifications (Parker, 2012). The broad use of case studies should have represented a way to make management accounting research more applicable, since they guarantee the examination of reality and the comprehension of the "antecedents and implications of managerial accounting methods" (Ittner & Larcker, 2002; Bromwich & Scapens, 2016). In this respect, they would have assisted in bridging the gap between theory and practice in management accounting research. This is especially true in light of the increasing number of interventionist studies (e.g., Chiucchi, 2013, Gatti, 2018) that demand researchers find a solution to a given (e.g., practical) problem while also making a theoretical contribution. Scholars have used interventionist case studies to try to establish that empiricism can help produce useful and important research (Lukka & Suomala, 2014). Management accounting lacks the societal significance and impact that would make its research genuinely beneficial, despite the expanding use of non-interventionist and interventionist case studies (Baldvinsdottir et al., 2010). One explanation is the “change from a major focus on the technical to a prevailing focus on the social,” as described by Baldvinsdottir et al. (2010), which manifests itself in the use of intricate sociological frameworks to examine empirical data. The

technical practicality (Mitchell, 2002; Modell, 2014) and the language spoken by those who should be its customers are still not at the center of management accounting research, especially when it is based on the adoption of methods like the case study method, which are so intertwined with reality.

Finally, it's important to note how literature has shed light on the fact that the relevance of management accounting research has declined due to exogenous variables like the systems adopted by governments to assess the quality of research carried out by universities and research centers. The studies conducted by ter Bogt and Scapens (2012) show the significance of adopting more quantitative indicators in evaluating academic achievement. For this study, the authors analyzed the accounting and finance programs at the universities of Groningen (the Netherlands) and Manchester (the United Kingdom) to find out how success is measured in each institution (UK). The evidence backs up the researchers' concerns and doubts about implementing quantitative systems. It was shown that academics publish in a small number of mainstream journals because to journal rankings, which are often associated with the adoption of quantitative systems, and this limits the influence of their research (ter Bogt & Scapens, 2012). This is consistent with the findings of Chalmers and Wright (2011), who claim that reward and evaluation systems prevent scholars from communicating with practitioners by pressuring them to publish in peer-reviewed publications that are only read by other academics. Despite researchers' best efforts to increase productivity and have their papers published in prestigious academic publications, few professionals take notice of their findings. This is due to the fact that both academic prestige and funding for institutions are highly dependent on the amount and "academic quality" of research output. The ongoing pressure scholars feel to publish in order to build their scholarly reputation is also emphasized by Mitchell (2002). Their main goal is to get their work published in scholarly publications, as this is the most reliable way to build their reputation as an expert in their field and move up the academic ladder. Hopwood (2008) echoed this sentiment, noting that scholars face internal pressure to increase the number of articles they publish, even if doing so compromises the quality of their work and the impact it might have on society (Gendron, 2008).

Because they appear to be the primary cause of the gap between theory and practice, the factors that have limited the impact of management accounting research have received a disproportionate amount of attention in the management accounting literature. The results of this research have been

useful in providing strategies for advancing management accounting's impact (Bromwich & Scapens, 2016; Hopwood, 2008; Mitchell, 2002).

2.5 Reviews that have Shaped the Development of Management Accounting

There was a clear divide between the management accounting research conducted and published in the more prestigious US academic journals in the 1960s through the mid-1980s, with the former focusing on the practice of management accounting. Argenti (1976) claims that complex alternatives were not likely to be implemented in the 1970s because that decade seemed to be the era of simple techniques. According to Coates et al. (1983), it appears that there is a large chasm between academic research and actual clinical application. Gregory and Piper (1983) found similar results, namely that there was little evidence of advanced techniques for stock control. Real-world interest in the previous decades' dry mathematics and economic modeling had waned by the 1980s, and by that time, the methodologies had mostly been ratified, so that only a small group of researchers were having any kind of meaningful conversation between themselves (Puxty, 1993). However, in order to meet external reporting requirements, individual product costs are erroneous and skewed due to the system's inability to allow process management inside cost centers. To better understand management accounting's function within an organization, some academics are now studying the field from a practical perspective (Scapens, 1985). It’s simple as getting back to fundamentals and asking what's most important and what makes the most sense for the company (Johnson and Kaplan, 1987).

The discrepancy between theory and practice, as well as the limitations of managerial accounting that is grounded in external reporting systems, have been discussed at length at various points in time and from different theoretical perspectives. Human relations, managerial theory, misaligned goals, the loss of relevance, and radical theory are the five areas of criticism that have been identified in the literature (Macintosh, 1994). Every one of these criticisms will get a quick introduction in the following paragraphs.

The effects of human beings in the workplace are front and center in the human relations critique. Many realizations occurred, especially as researchers learned more about the social dynamics of budgeting and the effects of superiors' varying approaches to using accounting data on their

subordinates (Macintosh, 1994). In response to this criticism, accountants in the mid-1960s began developing behavioral approaches to managerial accounting.

The term "managerialism" is used to describe a collection of ideas, attitudes, and values based on the premise that managers and managerial functions are essential to the success of contemporary enterprises. Barnard (1938) laid the groundwork for Simon's (1957) assertion that managerial decision-making is central to effective administration and management, but that managers themselves must be conceived of as decision-makers. Managers in charge of responsibility areas often make choices that are counterproductive to the company but that improve their own performance ratings in accordance with the standard metrics used (Macintosh, 1994). While this criticism does help us see why a single metric can't be used universally, it also serves to motivate the growth of conditional approaches and the improvement of agency theory and transaction costs economics.

As per Hopwood (2008), instead of being driven by the changing worries of experts, controllers, or even the overall population, the instruments directing the development of the accounting research plan seem, by all accounts, to be inward to the scholarly local area itself. Given the assumption that MAP effect relies upon its ability to connect with what supervisors do (Jönsson, 1998), one of the fundamental elements adding to loss of importance is the powerlessness to characterize research questions that are predictable with what professionals expect from research. This finding is even more unexpected and counterintuitive, according to several management accounting academics, notably Baldvinsdottir et al. (2010), considering the expanding number of studies that have recently embraced empiricism to investigate phenomena in the area. Several management accounting techniques have been developed over the past decade by consultants in collaboration with practitioners to close the management accounting discipline's gap between theory and practice. For instance, Time-Driven Activity-Based Costing was developed in response to Cooper and Kaplan's (1988) observation that the use of activity-based costing (ABC) was on the decline (Kaplan and Anderson, 2004). In addition, Kaplan and Norton's work on strategy MAP represents an expansion of the balanced scorecard concept (Kaplan and Norton, 2000; Armitage and Scholey, 2006). Research into the reasons for this success of new innovations is highly encouraged.

2.6 Contingency Theory

According to studies conducted in the subject of contingency theory, an organization's performance is determined by the compatibility of several elements. To begin, the selection strategy interpreted fit as the degree to which an organization matched the characteristics of its organizational setting. According to this theory, the environment in which an organization operates is what determines its structure. Early studies in the subject of contingency research employed this approach to learn more about the links between organizational context and design, but they neglected to look at how these elements affected performance. This approach allowed for a two-dimensional definition of both the task and the technology (Dewar & Hage, 1978). Multiple academics, notably Freeman (1973), have proved technology as a potential confound. Several characteristics of technology were found to have a strong correlation with organizational structure, as discovered by these researchers (Marsh & Manari, 1981). However, it is unclear from these studies whether various construction types performed well across a range of tasks and technological settings. Secondly, we see fit as the result of a two-way causal relationship between organizational form and environment (Khandwalla, 1977; Van de Ven & Ferry, 1980). For example, when comparing successful and unsuccessful businesses, Khandwalla (1977) found that the former had significantly stronger relationships with technological sophistication, structural aspects of vertical integration, delegation of authority, and sophistication of control systems. When comparing high-performing and low-performing businesses, this research found no statistically significant differences in the association between context and design. Further, it was unclear from these investigations whether or not context-design interactions enhanced outcomes. Thirdly, the systems approach is another way of thinking about compatibility that can be found in the literature of contingency theory. The systems theory states that to comprehend an organization's layout, one must look into all of the potential outcomes, structural options, and performance criteria at the same time. The system’s perspective offers a different way of thinking about compatibility. While the selection, interaction, and pattern approaches to fitness each have their advantages, equifinality (Van de Ven & Drazin, 1985) argues that none of them is superior. Possible solutions include a range of feasible alternatives. Van de Ven and Drazin advocated for the use of if-then investigations (1985). This allows for a more objective assessment of compatibility, and it's important to keep this in mind when creating organizational silos.

Some of the key assumptions underlying the contingency approach are stated outright, while others are only hinted at. A few of the key presumptions are outlined below.

1. When there is harmony between an organization's structure and the tools it uses, productivity rises, for example, financial indicators like ROI, net profit, and net worth are used to quantify success.
2. Organizational actors always act in ways that further organizational effectiveness, the overarching goal. Decision-makers in any given organization will always agree on the ultimate end-state because of this.
3. The environment, for instance, is a given, and managers and, by extension, organizations, have no control over it.
4. A common feature of deterministic models is the ability to draw direct conclusions about the nature of the relationships between variables.
5. Evidence based techniques that do not involve looking back in time, such as cross-sectional studies.
6. Most studies of contingent events use statistical techniques grounded in the general linear model, such as regression.

2.6.1 Application of Contingency Theory in Management Accounting Research

Management Accounting Practice may vary from organization to organization. In 1961, Burns & Stalker (1961) answered the question that why management accounting practice may differ from one organization to the other. Before 1970, there was no reference about Contingency Theory (CT). Notwithstanding, Drury (2004) expressed that in the mid of 1970s, CT was expected that ideal MA was relevant to all associations. Possibility hypothesis approach anyway advocates that there is nobody 'best' plan for the MA, yet CT relies upon the situational factors. Otley (1980) expressed that every association will have its own MAP. Post, Noreen and Seal (2006) referenced that possibility speculations in MA are the class of social hypothesis that argues that the authority style that is powerful in certain circumstances may not find success in others.

Contingency based research has a long practice in the investigation of the executives bookkeeping (Chapman, 1997; Chenhall, 2003; Gerdin & Greve, 2004). In 1980, Otley applied CT to the board

bookkeeping rehearses and alluded that there is no single general bookkeeping practice can be applied to all associations. Rather, this hypothesis proposes that specific highlights of a proper accounting framework will rely on the particular conditions in which an association tracks down itself (Otley, 1980). CT should accordingly recognize explicit parts of a accounting framework which are related with specific characterized conditions and show a fitting match. Analysts to date have endeavored to make sense of the turn of events or change of MAP by analyzing plans that best suit contingent factors including the idea of the climate, innovation, size, design, and technique.

Albeit the discovery from contingency hypothesis concentrates on has not forever been predictable and the methodology is restricted as far as its capacity to catch examples and elements, by the by throughout recent years the possibility hypothesis has given a helpful, hypothetical system for various investigations of hierarchical construction and conduct (Chenhall, 2003 and 2007). The management research has prompted a progression of survey articles giving a general image of the possibility hypothesis' commitment to accounting overall and the MA specifically (Chapman, 1997). Chenhall (2003) surveys exact contingency-based research created since 1980s. His extensive review concludes that “to maintain the relevance of MCS (management control systems) contingency-based research, scholars will need to focus their attention on contemporary dimensions of MCS, context and organizational and social outcomes” (p. 161).

One of the prior works in MAP taking on a possibility viewpoint was Hofstede's (1967) exemplary field work. Hofstede (1967) found that monetary, mechanical and humanistic contemplations fundamentally affected the working of planning frameworks. Furthermore, social impacts on management control frameworks have been considered (Hofstede, 1983; Brownell, 1982; Brownell & Hirst, 1986). This has turned into a significant area of exploration (Harrison, 1992, 1993; O'Connor, 1995; Taylor, 1996; Chenhall, 2006).

Tabitha and Ogungbade (2016) found that inside the last ten years, CT has been applied in assembling and administration businesses in more ways than one by a few creators. Nair and Nian (2017) involved possibility idea in their review to look at whether - association size, force of market contest, level of capability of accounting staff and high-level creation innovation, essentially affect The MAP in Malaysia or not. Oyewo (2017) applied CT to assess the adequacy

of the MA capability and saw that the viability of the MA capability were essentially impacted by the six context oriented variable - company's firm's size, age, sector, existence of management accounting department, affiliation to foreign entity and public quotation status. The decision of fitting execution measures, in any case, is probably going to be affected by the few relevant elements distinguished in the contingency-based research (Chenhall, 2003). Concentrating on the relationship between the chose contingent elements and the utilization of NFPMS, Ahmad & Mohamed (2015) has tracked down a huge relationship between the three factors; proprietor/director contribution; size of the organizations; and utilization of current manufacturing innovation with the more extensive utilization of NFPMS. The discoveries suggest that the assembling firms utilize NFPMS when their organizations experience functional intricacy as consequences of business extension, development in the utilization of current innovation and when the proprietor/supervisor is focused on their utilization.

Ahmad & Zabri (2016) view contingent factors as outside and inside factors. While inside not entirely set in stone as innovation, authoritative viewpoints, and procedure; outside factors demonstrate the elements of outer climate at the degree of business and accounting that shape inward frameworks. Again, Battilana & Casciaro, (2012) opinioned that viable MAP ought to line up with both inner and outside factors endorsed by possibility point of view. In their review they compared proprietorship design or the executives and key faculty as inward factors though the outside variables can be compared to mechanical change, rivalry and market influences.

Abdel-Kader and Luther (2008) applied contingency theory to respond empirically the improved understanding of the relationships between 10 contingency factors and management accounting techniques in the UK's largest industry sector. These variables are related to external characteristics (Uncertainty & Industry specific factors), organizational characteristics (degree of centralization, Size & Strategy) and manufacturing or processing characteristics (Operational complexity, technology, total quality management, just-in-time &the nature of its production processes).

Alleyne and Marshall (2011) used the contingency theory to examine the manufacturing firms in Barbados and discovered that a number of variables, including timeliness, technology, efficacy, information requirements, and adoption of best practice, had a significant impact on the decision

to use certain management accounting practice. Haq (2018) conducted research on various types of Pakistani companies, using contingency theory to determine whether the design of management accounting practice was impacted by the environment's uncertainty, an organization's nature, its strategy, its organizational structure, advanced manufacturing technology, total quality management, and just-in-time production. Ogungbade & Oyerogba (2020) noted in their study that the management accounting procedures among manufacturing enterprises in Nigeria depended on each firm's culture. As indicated by Morton and Hu, (2008), the Possibility hypothesis places that a proper match between authoritative attributes to possibilities will work on hierarchical viability. This assertion was upheld by Adu-Gyamfi and Chipwere (2020) study, shows that the huge commitment of the MA factors to making sense of varieties in the degree of authoritative execution demonstrates that managerial performance is dependent upon the executives bookkeeping factors. Gichaaga (2014) found that a proper MAP relies on hierarchical logical factors, and he connected possibility hypothesis with his concentrate as it underscored that each association embraces the MA procedures reasonable to its current circumstance.

Otley (1980) investigated the possibility-based MA writing for reason for assessment and further developing a model putting together it with respect to thoughts of hierarchical control and viability. Otley (1980) focused on the significance of CT in MA research, yet then again perceived that the explored examinations depended on a deficiently and deficiently verbalized model. The survey brought about three reservations as follows. The principal issue was connected with the need for contingent elements to be all the more completely made sense of and hypothetically and experimentally inspected. The subsequent concern was the need to consider hierarchical viability for motivation behind acquiring the right CT of control situation plan. Hayes' model (1977) considered prior managerial viability while concentrating on the relationship between contingent elements and MAS plan.

2.6.2 Framework of the Implementation of Contingent Factors and MAP

The initial framework designed to show the connection between the volume of MAP use and other contingent elements is covered in this paragraph. The five internal determinants were as follows: firm size, company age, ownership participation, accounting staff qualifications, and technological usage. Here ownership participation means the practice of MAP by the company’s owners and

managers. The research model based on contingent factors has been followed by previous studies such as Ahmad (2012), Hamdan (2013) and Shil (2017). Figure 2.3 shows the conceptual framework of contingent factor and management accounting practice.

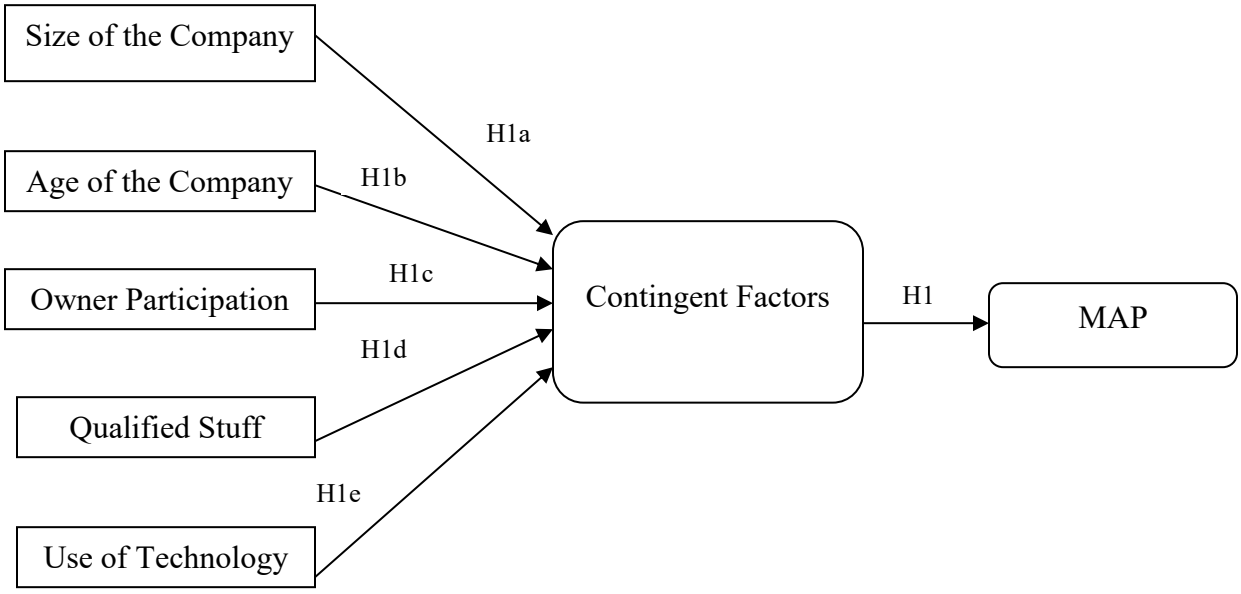

Figure 2.3: Conceptual Framework of Contingent Factor and Management Accounting Practice

Internal aspects show how management preferences and firm characteristics might affect the handling of organizational problems or the plans for expanding organizational processes, goods, or services (Makhija, 2003). Internal factors are exclusive to the company, as opposed to external forces, which are outside of its control. They consist of the business's controllable resources and capabilities (Galbreath & Galvin, 2008). As a result, the current study primarily looks at the internal features of the companies under investigation. According to the resource-based view (RBV), a firm's ability to effectively manage and use its unique internal resources is what determines whether it has sustained a competitive advantage. According to this notion, the firm's competencies and resources will decide how well it performs. The firm's empowering process toward the development of its competitiveness will be determined by its resources, which include

assets, skills, and capabilities. According to Teece et al. (1997), a firm's resources determine whether it has a competitive edge. Barney (1986) added to this by proposing that resources can be broadly construed as assets, organizational processes, firm qualities, information, or knowledge, all of which are under the authority of a company and can be used to create and carry out the company's business strategies. According to Barney, Wright, and Ketchen (2001), a corporation is made up of a variety of resources, skills, and capabilities. The difference between companies can be noted by their respective resources, competencies and capabilities, all of which can determine the firm's competitive advantage.

Therefore, the business processes and management accounting information system of the company are used in this study as key resources that would aid organizations in producing a superior level of financial performance. The more general MAP, such as costing, budgeting, performance evaluation, information for decision making, and strategic management accounting, were covered in the middle of this study. Finally, a vertical continuum representing the various MAP implementation extents was drawn on the right-hand side. It begins at the bottom right of this continuum with MAP that implements a low extent of MAP (a small number), and it concludes at the top right with MAP that implement a big extent (a wide range) of various modern and classic MAP. Again, between the top and bottom of this continuum, there are different extents of MAP 'implementation with other stop off points 'possible.

2.6.3 Framework of Financial Performance with the Implementation of MAP

According to the contingency theory of organizations, a number of contingent circumstances will influence how an organization performs in respect to its features. This idea contends that management accounting procedures and information systems cannot be generally applicable and must be developed to support organizational priorities (Johnson & Kaplan, 1987; Shank & Govindarajan, 1993). More precisely, the adoption of MAP and the deployment of management control systems must successfully complement the business plan of the organization (Otley, 1992). High organizational performance may result from an environment, strategy, structure, and systems that are well matched (Govindarajan, 1988).

A conceptual model is created to postulate on the relationship between MA and performance in order to experimentally investigate the relationships between MAP and performance of manufacturing industries in Bangladesh. In this conceptual model, MAP (costing system, budgeting, performance evaluation, information for decision making, and strategic management accounting analysis) are the predictor variables, while the market competition, accounting staff, owner/management participation, and technological changes have also been operationalized as determinants or agents that influence the choice of management accounting. The selected factors and variables of the research model based on MAP impact towards financial performance have been followed by the previous studies such as Ahmed (2012), Adu-Gyamfi and Chipwere (2020), Gichaaga (2014), Gnawali (2017), Nik Abdullah et al. (2022), Sharkar et al. (2006) and Shil et al. (2010). This hypothesized research model is shown in Figure 2.4. The following will emphasize the proposed connections between the research constructs.

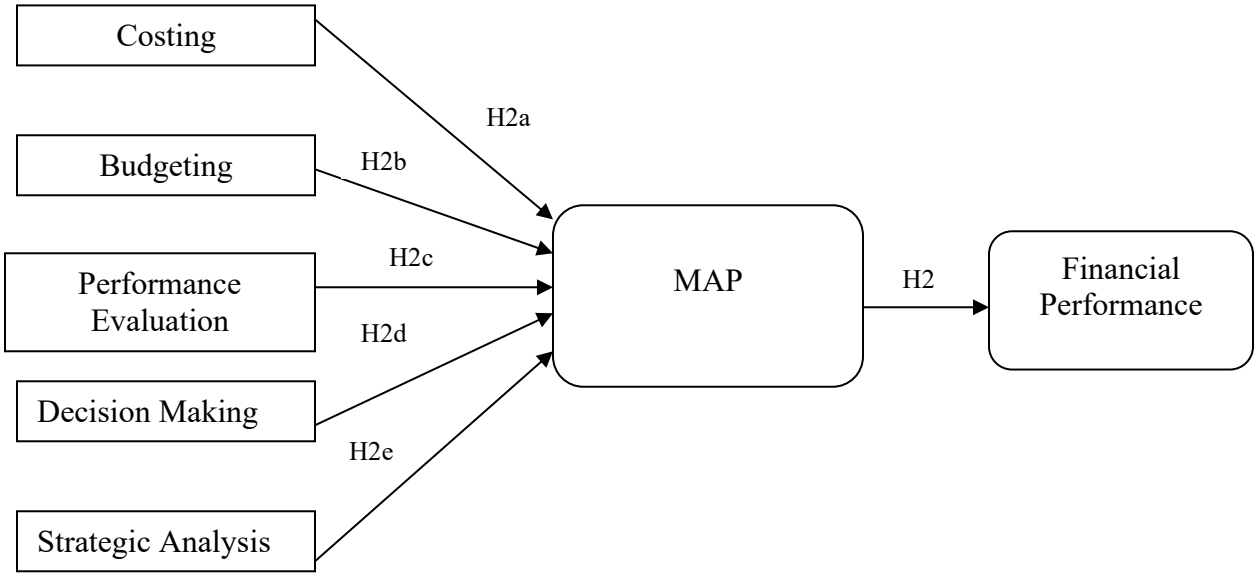

Figure 2.4: Conceptual Framework of Management Accounting Practice and Financial Performance

2.7 Framework of Mediation Analysis

Figure 2.5 shows the framework of mediation analysis as rationalized decision making is a mediating variable. According to Ghose and Chan (1997), organizations are progressively adopting various management accounting techniques, although they have not attained significant effectiveness. This demonstrates that the efficacy of management accounting, particularly in decision-making, is not limited to the techniques employed, but rather to the manner in which these techniques are utilized. Consequently, this frequently indicates the methods by which data is gathered, analyzed, and shared. The utmost importance is in the quality of reports that are created to facilitate ultimate decision-making.

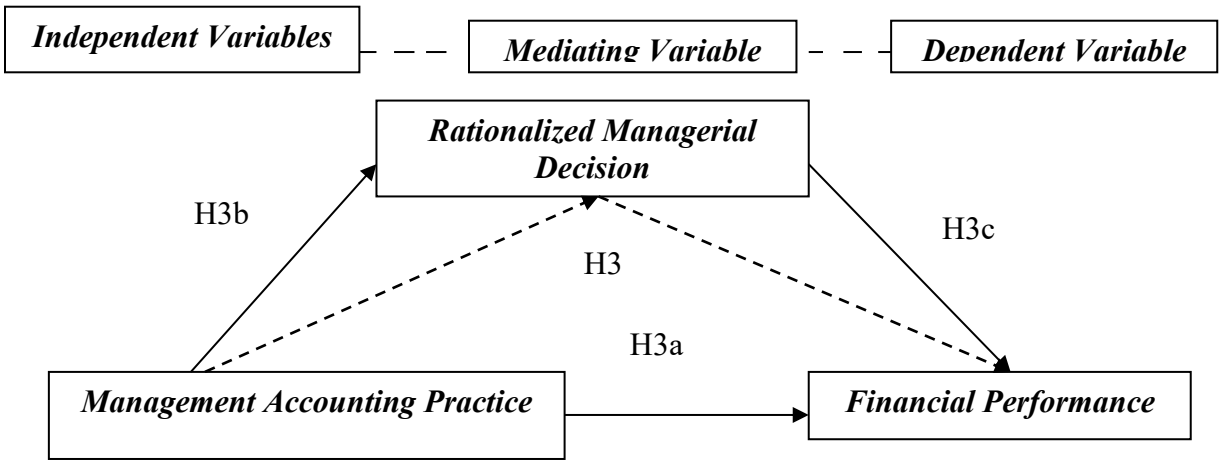

Figure 2.5: Framework of Mediation Analysis as Rationalized Decision Making is a Mediating variable

Therefore, failing to consider the impact of these factors on decision making can result in undesirable consequences. Chan (2002) conducted research in Singapore that was relatively similar in nature. The findings revealed that management accounting is influenced by the challenge of dynamic fluctuations in the environment, and organizations should take these factors into account. Neglecting to do so can consequently diminish the efficacy of decisions made. Furthermore, these modifications impact on the way managers gather, analyze, and convey information. This might occur due to corporate restructuring, technological advancements, and other organizational modifications implemented by the company. This emphasizes the need to

direct attention towards the methods organizations employ to gather, analyze, and disseminate information. The mediation model has been followed by the previous studies such as Breuer et al. (2013), Dahal et al. (2020). Framework of mediation analysis as rationalized decision making is a mediating variable and the management accounting used as independent variable and financial performance used as dependent variable of this mediation analysis.

2.8 Conclusion

Anyone who must make decisions within an organization should be aware of management accounting theory. The practical applicability of management accounting theory is one of the most crucial indicators of firm's success. Additionally, proponents of positive accounting theory concur that it is a useful theory. Despite the growing use of quantitative and qualitative studies, management accounting agreed with the societal importance and influence that would make its study truly valuable. Not only society, but it also has significance on national development process through the progress of firm's financial performance.

Chapter 3

Literature Review

3.1 Introduction

This chapter provides a definition of management accounting (MA) as well as its concepts and theories; it also discusses various management accounting practice (MAP) as well as a firm's performance and its determinants; and it concludes with a summary of empirical literature pertinent to the study.

3.2 Management Accounting and Evaluation of Management Accounting

Management accounting was first recognized as cost accounting. This origin was reflected in the earlier title for practitioners of cost or work accounting (Wilson & Chua, 1988). Accounting historians have long held that cost accounting arose as a result of the industrial revolution (Johnson, 1981). For example, Wilson and Chua (1993) asserted that cost accounting was used in the mechanized, multi-process textile mills that first emerged in England and the US around the 18th century. This perspective was reliable, and cost accounting had arisen solely after the 18th century because of the ascent of the manufacturing plant framework in modern unrest. Cost accounting, according to the conventional view, arose because of increased use of fixed capital, prompting accountants during the modern transformation to unite cost accounting and accounting onto the two-fold passage framework (Johnson, 1981). Cost accounting is characterized as what could be compared to direct costing, intended to give monetary data to the board for navigation and control (Johnson, 1981). Practice and hypotheses of cost accounting could be traced back to the 14th century. During this time, there was a rapid development of Italian, English, and German businesses, as well as various modern endeavours in the assembly of woollen fabric, books, coins, and other items. As of now, cost accounting is worried about those parts of general accounting that have to do with recording and investigating production line expenses. The first indication of cost accounting discovered was the job order costing of wool carding in Italy (Chenhall & Morris, 1986). However, according to Garner (1947), the first explicit illustration of cost accounting expansion in the UK happened during the time in power of Henry VII of England (1485–1509). Currently, a large number of small woollen makers who disliked organizational constraints in

urban communities have relocated to rural towns and established modern networks, hoping to sell their completed items through channels other than coordinated societies (Garner, 1947).Costing turned into an essential for progress when the little processing plant proprietors ended up contending not only against the organizations but also in the middle of themselves. Afterward in the 16th century, the accounts of the Flemish printer and publisher contain numerous components of a cutting-edge work request and cost framework. Planting made a separate record for each book he accepted to distribute (Blough, 1947). In 1903, H.L. Arnold, the American specialist, published an article wherein he presented various examples of recent American practice as well as his own perspectives on the genuine object of cost and double entry bookkeeping. Cost accounting expanded further in the 19th century and into the 20th century as a result of augmented industrialization and the growing size of organizations (Blough, 1947). Caplan et al. (2007) pragmatic that, at beginning of the 20th century, the fields of modern design and accounting was formed a partnership. During this time, modern specialists developed methods for controlling invention that incorporated a scientific assurance of guidelines for the contributions of factors of production against which genuine results may well be measured. Following this development, manufacturing firms began to use standard costing frameworks, which are still extensively worn for development and control (Caplan et al., 2007). Johnson and Kaplan (1987) state that, after 20th century cost accounting has been introduced as management accounting (MA). From a distorted viewpoint, the cost accountant primary mission could have been portrayed as the pursuit of the essential facts of the matter, where truth was defined as getting as exact or exact expenses as could reasonably be expected, and the theme of "different costs for different purposes" was emphasized a preoccupation with discovering conditional truth (Horngren, 1975).

The development of new corporate designs, for example, multidivisional associations, combinations, and global undertakings, was the component that drove from a costing to an administrative accent (Wilson & Chua, 1988). These new underlying structures put new expectations on an organization's accounting capabilities. For example, a method for assessing divisional execution must be contrived. Likewise, costs must be laid out for merchandise that was offered by one division to another within a similar association. These extra-instructive prerequisites prompted an expansion of the theme away from a limited costing accentuation (Wilson & Chua, 1988). Also, in the middle and late 20th century, the development of

administration businesses like monetary establishments, an extension in the number of states, and semi-government associations further upheld the advancement of MA (Wilson & Chua, 1988). In 1986, it accepted its illustrious contract and turned into the "Chartered Institute of Management Accountants (CIMA)." In the United States, the "National Association of Cost Accountants" changed its name to the "National Association of Accountants" in 1958 (Scapens & Yan, 1993). This organization became the "Institute of Management Accountants (IMA)" in 1991. By and large, it very well may be seen that after the nineteenth hundred years, the center changed from cost bookkeeping to an emphasized on the arrangement of data that was suitable to the necessities of administrators. Traditional expense ideas and costing procedures that were appropriate for a manufacturing process must be adapted for different organizations. With these progressions in mind, the term "cost accounting" does not, as of now, sufficiently depict the bookkeeping capabilities within an association. As a result, the terms "executive accounting and managerial accounting" became more widely used and foundation of Cost and the MA in 1972, the progressions from cost accounting (CA) to the MA were also demonstrated.

3.2.1 Definition of Management Accounting

Scapens (1991) stated that there is no generally agreed-upon definition of management accounting (MA). Several definitions are accessible; however, some are excessively broad to give a reasonable construction, while others essentially accent a specific exploration approach (Scapens & Yan, 1993). Academic accountants and executive associations characterized the MA in different ways. As indicated by Horngren et al. (2015), the MA is an organized way of estimating, breaking down, and detailing monetary and non-monetary data that assists chiefs with settling on choices to meet the objectives of a specific element. Administrators use the MA data for two primary purposes: 1) "developing, communicating, and implementing strategies," and 2) "coordinating decisions on designing products, producing, and distributing them, as well as assessing the performance of the company." Management accounting (MA) was defined by Atkinson et al. (2012) as a course of giving monetary data, (for example, item cost data, administration conveyance cost, and the expense of a movement or business process) and non-monetary data (like data on fulfilment and client faithfulness, process quality and practicality, development, and representative inspiration) that helps undertaking the board in simply deciding, designating assets, checking, and performing. Agreeing (Webster, 2004), the MA includes recognizing, gathering, and characterizing data that

aides in evaluating and examining cost, execution, and pursuing convenient choices. The “Institute of Management Accountants (IMA)” has delivered definitions of MA that business demand and the access of accounting issues. The initial definition of MA by the IMA (1981) defined MA as “the process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of financial information used by management to plan, evaluate, and control an organization and to assure appropriate use of and accountability for its resources.” But more newly, the explanation (IMA, 2008) was “a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization’s strategy.” The shift in definitions shows management accountants' role evolving from an exchange and compliance to that of a strategic business partner who assists organizations in their performance, budget development, governance practice, risk analysis, and financial coverage at a time of great change and who is an expert in cost management methods (IMA, 2008).

The CIMA is a professional organization based in the United Kingdom. CIMA (CIMA, 1987) defined MA as the provision of information required by management for purposes such as policy formulation, enterprise planning and control, decision making on other options for action, disclaimer to those outside the entity, revelation to employees, and asset protecting. This information provision ensures the following:

(a) Creating plans to achieve goals (long term planning)

(b) Development of short-term operational plans (budgeting/profit forecasting)

(c) Actual transaction recording (financial accounting and cost accounting)

(d) Corrective action to align future actual transactions (financial control)

e) Obtaining and managing finance (treasureship)

(f) System and operational reviews and reporting (internal audit, management audit).

The MA had advanced to a more extensive job, as per CIMA's changed form of the MA wording (CIMA, 2005). The MA is portrayed as the utilization of accounting and monetary administration standards to the creation, security, protection, and improvement of significant worth for partners of for-benefit and non-benefit ventures in people in general and confidential areas. CIMA (2005) expanded on the description of MA to reaffirm that it is essential issues of accounting that analyze, present, summarize and recognize information to:

1. Contribute to strategic decisions and company strategy formulation.

2. Plan long-term, medium-term, and short-term operations.

3. Capital formation and fund accumulation.

4. Create incentive plans for executives and shareholders.

5. Contribute to operational decisions.

6. Maintain operational control and ensure resource efficiency.

7. Access and communicate to management for reporting the firm’s performance.

8. Protect both tangible and intangible assets.

8. Put in place company performance, risk management, and internal control systems.

Moreover, CIMA's changed definitions show that MA has drawn nearer to senior administration worries with an emphasis on productivity, vital preparation and magnitude. IFAC (1989) defined management accounting as “the process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of information (both financial and operating) used by management to plan, evaluate, and control within an organization and to assure use of and accountability for its resources”. However, only nine years later, the scope had broadened significantly, and the “Financial Management and Management Accounting Committee (FMAC)” of the “International Federation of Accountants (IFAC)” issued revised “International Management Accounting Practice” (IFAC, 1998), which viewed management accounting as an

interaction that is entwined in the management processes of all organizations. Management accounting is the component of the management process that focuses on adding value to organizations by ensuring optimum resource utilization by people in dynamic and competitive environments.

3.2.2 Perspectives on the Origin of Management Accounting

The origins of management accounting are traced in academic literature from two distinct viewpoints. The economic approach is recognized by authors such as Chandler (1977), Kaplan (1984), and Johnson and Kaplan (1987). The other approach, known as the non-economic approach, is endorsed by authors such as Miller and O'Leary (1987), Hoskin and Macve (1988), Ezzamel et al. (1990) and Luft, (1997).

Economic Approach

Chandler (1977), Johnson & Kaplan (1987), Kaplan (1984), and Atkinson et al. (2012) all support the economic viewpoint. Proponents of the monetary methodology that MA (MA) practice began in the classified region to help with business assignments. For example, Johnson and Kaplan (1987) state that the early stages of modern MA can be traced back to the advancement of various balanced endeavours in the nineteenth century. During this period, the need to secure efficiency in progress was perceived. Plant owners started utilizing workers on a long-term basis in a concentrated workspace, and in this way, the improvement of different affiliations evened out. Handling plants was a significant part of the time, arranged in a noteworthy division from the managerial focus of the owners, and information structures were supposed to augment and judge the efficiency of the chiefs and workers at the modern office. Prior to this time (the cutting-edge turmoil period), workers were selected on a temporary basis and paid based on work done, while plants were self-made. Accounting's capability was thus limited to supporting records. Another significant primary reason for the improvement of the MA structures was the rapid expansion of railroads during the nineteenth century. New measures, such as cost per ton per mile, cost per voyager per mile, and extent of working expenses for money, were developed and implemented on a divided and regional scale. These activities were thus embraced and linked in other business areas. Johnson and Kaplan (1987) reason that MA structures were created to convince and evaluate

the capability of inward cycles and not to measure the general advantages of the affiliation. In this way, various FAS should be created to record trades and collaboration data for arranging yearly spending plan rundowns for the owners and credit managers of the firm. The MA and FA ought to, in this manner, work independently of one another. According to Drury (1996), further advances in MA were related to the development of logical administration. Advocates of this development, led by Fredrick Taylor, focused on improving the effectiveness of the creation cycle by rearranging and normalizing the tasks, which will thus further develop productivity. In 1911, Sanction Harrison distributed the principal set of conditions for the examination of cost changes. By 1920, modern frameworks to record and examine differences from norms had been executed and enunciated in writing. Impels in MA can also be attributed to the advancement of multi-developmental, extended relationships throughout the twentieth century. Different managers run the associations' divisions. The job of top management has evolved into one of coordinating various activities, planning philosophy, and selecting the most beneficial allocation of funds to a large number of activities. New MA strategies were imagined helping these activities. The "budgetary planning and control systems" were made to ensure that the different activities of diverse divisions were in line with the overall corporate targets. In like manner, the extent of benefit from adventure was considered to measure the result of each and every division and the entire affiliation. Structures of evaluation were later developed in the hope of providing a fair basis for accounting benefits between sectors.

However, the greater part of the MA rehearsals right now being used had been formed by 1925, and, for the subsequent years, there was a stoppage in MA developments (Johnson & Kaplan, 1987). As per Atkinson et al. (2012), toward the end of the 19th century, Andrew Carnegie, in his steel organization, created definite frameworks to record the expense of material and labor. Carnegie seriously concentrated on cost behavior and based on data from cost frameworks, continually diminished the expenses at his manufacturing plants while simultaneously closing the areas that were sufficiently horrendous. Carnegie exploited his expense advantage by bringing his costs down to levels that his competitors couldn't coordinate. As a result, Carnegie's excellent expense frameworks gave him a practical advantage on the hunt and aided the development and progress of his organization. Imaginative organizations in MAP are named "DuPont, General Motors, and General Electric" (Caplan, 2006). The DuPont Corporation in 1903 saw developments

in the field of MA, including the utilization of return on initial capital investment for execution evaluation (Kaplan, 1984). During this period, outside monetary shows empowered a financial accounting mindset, bringing about MA's following and becoming docile to financial accounting rehearsals. It was contended that the expense of running the two systems was unnecessarily high at that point, making it hard for managers to autonomously run the two structures. Later headways in MA might be trailed by Boer (2000) in making. He affirms that MA started under the mark "cost accounting" in the distant past and split from cost accounting in the 1950s. A Hunt of the "Harvard Business School Library" by Boer (2000) one can distinguish just four MA books that were dispersed proceeding to 1960; one was dispersed in 1953, and the rest were circulated after 1956. During this time, standard costing was seen as the key bookkeeping apparatus in cost control, and barely any individuals scrutinized the capacity of standard costing to give successful administrative control. Prior to the 1970s, both intellectual and expert associations advanced standard costing, according to Anita Kusuma et al. (2021). The primary monetary proportions of managerial performance were cost variation, net benefit, and profit from venture.

Non-Economic Approach

According to Hoskin and Macve (1988), the non-economic approach contends that in the late nineteenth and early twentieth century's, control was created in "governmental institutions" such as the military by estimating individual execution and examining it in relation to standards or principles. Workplaces that aggregated public flourishing pieces of information similarly presented these exercises before they were commonplace in firms. They battle that MAP was made for disciplinary and scholarly assessment purposes and were not supposed to help business, as struggled by the advertisers of the financial system. According to Hoskin and Macve (1988), two establishments could have added to the improvement of the MA in the US during the 19th century. The foundation figured out how to deliver graduates who later functioned at Springfield in top situations after utilizing numbers to grade understudies (assessments). They presented the administration by numbers method learned. As for Hoskin and Macve (1988), later improvements in accounting originated from progresses recorded as a hard copy innovation, which include:

i. The use of formal exams that had been evolved in education libraries; and
ii. Disciplinary methods for evaluating texts and retrieval of information.

The presentation of composed assessments and the mathematical scratching coordination in the colleges extraordinarily advanced the expansion of accountability and accounting. Moreover, as per O'Leary (1987), the headway of new execution gauges in both private and public areas was connected to the ascent of current human sciences in the nineteenth hundred years. This was brought about by their thoughts and guidelines of human execution, record keeping on individuals, and control through discernment and assessment. They contend that without this wide improvement in academic streams at that point, it is sketchy whether owners and chairmen of firms would have taken on new various leveled rehearses as they did. Finally, proponents of the non-economic approach argue that MA drills were developed initially for disciplinary purposes rather than to aid business activities. According to this argument, the issue of pertinence lost raised by Johnson and Kaplan (1987) does not emerge. They support the claim that traditional MA exercises are ineffective for assisting with business tasks, but that this significance was overlooked from the start of this practice.

3.2.3 Development of Management Accounting

There has been very little written about the history of the use of accounting data for decision-making activities. This aspect of decision-making eventually led to the development of management accounting. Historical knowledge, according to Nielsen et al. 2015 can aid in future decision-making. Investigating the current and future conditions of the MA requires an emphasis on its set of experiences. For quite a while, investigation into the historical backdrop of accounting was viewed as both of little worth or for of resolving current functional issues. This discussion has expanded the general legitimacy and effortlessness of the exploration (Parker, 1999). It is fitting right now to recognize between cost accounting and the MA. Drury (2004) recognizes that these terms are unclear and regularly utilized equivalently however by the by characterizes them as follows: “Cost accounting is concerned with cost accumulation for inventory valuation, whereas management accounting relates to the provision of appropriate information for decision making, planning, control, and performance evaluation.”

Historical Development

Maher (2000) states that “management accounting has a short but exciting history: while management accounting concepts can be traced back at least to the beginning of the Industrial Revolution, management accounting as a teaching discipline appears to have got off the ground in the late1940’s.”

Parker (2002), “Management accounting has historical antecedents that stretch back longer than we might expect and certainly accounting historians have not yet concluded their investigations of its earliest genesis”.

Cunagin and Stancil (2002) believe that “management accounting with its lack of generally accepted accounting practice has not yet had the exposure afforded to financial accounting. The history of management accounting is one of innovation based on necessity. Innovation therefore continues without constraints imposed by preconceived ideas of what constitutes proper accounting.” The verifiable improvement of the MA is of specific significance in responding to importance inquiries in a quickly creating technological environment. The advancement of the MA can be put in the authentic settings of two unrests: the first from 1950 to 1980 and the second from 1980 to 1999, these upheavals are portrayed as far as estimated times during which major key changes happened in the field of the MA (Epstein & Lee 1999). While the MA ideas can be traced back to the beginning of the Modern Unrest, the MA as a show of discipline appears to have taken off in the late 1940s. Parker (2002) agrees: the MA has verifiable predecessors that stretch back longer than we could expect, and certainly the account holders of history have not yet closed their examinations of its earliest beginnings. Ezzamel et al. (2003) acknowledge that MA has not yet had the openness to financial accounting that it requires due to the absence of widely accepted accounting practice. The historical backdrop of the MA is one of development in light of need. Development along these lines goes on without limitations forced by assumptions about what constitutes "proper" accounting. The verifiable advancement of the MA is especially important in responding to pertinent questions in a rapidly evolving mechanical environment. The improvement of the MA can be set in the authentic settings of two upheavals: the first from 1950 to 1980 and the second from 1980 to 1999. These unrests are depicted as rough times during which major vital changes happened in the field of the MA (Epstein & Lee 1999).

Management accounting before the First Management Accounting Revolution (1700 – 1950s)

The International Federation of Accountants (IFAC) (2002) defines "the period preceding the first management accounting revolution as the classical period," which ended in the late 1950s. Fleischman & Tyson (1993) assistance to cost accounting was particularly scarce during this time period (especially from 1820 to 1885). Following quite a while of simply recording monetary data, Johnson and Kaplan (1987) notice the development of various leveled associations (for example the material plants in the main portion of the 19th century, the rail lines that were laid out in the center of the 19th century and the steel organizations that arose during the last part of the hundred years) that all encouraged another interest for accounting data. The "Industrial Revolution" during the 18th and 19th century introduced new difficulties to bookkeepers. Business tasks turned out to be more complicated and data was expected to work with those activities. Manufacturing exercises increased, and as per Wyatt (2005), accountants were supposed to give data to control consumption and to cost made items. The label of MA was not utilized in the Anglo-Saxon world prior to the "First Management Accounting Revolution". The expression "cost accounting" was utilized to characterize processes for the calculation of expenses and for monetary control. In spite of the fact that MA was not perceived before the nineteenth century when masses of monetary data must be recorded, it is very conceivable that financial specialists were at that point utilizing the MA ideas at that point.

However, in Parker's (2002) address to the "Chartered Institute of Management Accounting" (CIMA), he expressed that there was solid proof of a full scope of cost management practice in the English extractive, iron, and material ventures before the 1900s. During this period, CA was clearly seen as an essential specific activity to seek after various levelled targets. Affiliations that were spread out during this period to spread the work performed by bookkeepers underlined the usage of cost accounting (IFAC, 2002). The North American affiliations that made MA systems were the integrated cotton material handling plants that were spread out after 1812. They utilized cost records to decide the quick work or more normal expenses of changing over regular materials into yarn and surface (Johnson and Kaplan, 1987). Perhaps the earliest circulation of the rules of CA, specifically "factory accounts," made by the Garcke ana Fells (1887). Cost issue also significantly discusses in the paper namely "The Relation of Cost to Value" (Parker, 1969). Among

the initial manufacturing cost records found by American historians, “Boston Manufacturing Company” was one of them. Organizational records dated as early as 1815 uncover an amazingly complex arrangement of cost accounts. Accounting records from Lyman Plants dating back to the mid-1850s show that, in addition to twofold section monetary records, twofold passage industrial facility records with related stock, finance, and production cycle were kept. As indicated by these records, manufacturing plant overheads and things, for example, fuel, starch, and fixes, were appropriated to various factory accounts by alluding to rules, for example, floor space or number of weaving machines (Johanson & Kaplan, 1987). Robles and Robles (2000) express that the years somewhere in the range of 1880 and 1889 might be viewed as the beginning stage of the MA:

“By this time, Management Accounting had made significant progress, primarily in terms of burden / overhead concepts, emphasizing the importance of accounting by functions.”

With the costing renaissance deep rooted, significant distributions for the MA time started to arise. Somewhere in the range of 1880 and 1889, “Neuner published Accounting Principles and Practice”. One important perspective communicated in this book was that cost accounting ought to be reexamined from an administrative outlook. Edwards and Coase proposed comparative thoughts in 1938 when they zeroed in on departmentalized costing. The Dennison Assembling Organization's MA records are one of the most incredible instances of early MA records. This little privately-owned company started in 1844, at first delivering hand-created paper boxes for goldsmiths. Dennison in the end had a processing plant in Marlboro, Massachusetts, and auxiliaries in Canada and Britain by 1896. Henry Dennison, the organization's leader and a productive essayist and history specialist, verified that the total of the organization, including all accounting transactions, was kept start in 1917. Dennison held the accompanying convictions:

“If the Dennison Manufacturing Company can derive principles for better evaluation from past and present performance, then long-term success appears much more likely (Vollmers, 1998).”

The Dennison accounting records deliver important insights into management accounting practice during the period, particularly given Dennison's international presence (Vollmer, 2003). Dennison's records give a sequential outline of the organization's set of experiences, as well as

incredible references to cost MA rehearses at that point. Manufacturing plant hourly rates for something like twenty years (1910-1930) were found, containing the principal proof of a different MA framework from the money related framework. In any case, the information doesn't determine how contrasts between the production line's costing strategy and its financial accounting framework were settled (Vollmer, 2003).

i. Accounting for sales costs (1928). This document went into detail about the costs of selling.
ii. Analysis of distribution costs and their impact on pricing policy (1933). This publication went to great lengths to establish price based on cost.
iii. Dennison Manufacturing Company distribution costing (1936). Methods for dealing with the costs associated with product distribution were described.
iv. Office activity standards and wage incentives (1936). This document is the first evidence of the existence of standard costing systems.
v. The use of cost accounting as evidence in Robinson-Patman Act cases (1938). This publication aided employers in providing evidence on how costs were calculated.
vi. Industrial corporations' budgetary and financial policies (1944). These policies were among the first to establish budget guidelines.

Moreover, the previous archives give substantial proof that, while not formally recorded, the executives bookkeeping existed at the turn of the 20th hundred years. The most recent thirty years of the nineteenth century have even been named a “costing renaissance” (Parker, 1969). During the “Industrial Revolution,” people were so in wonder of the capacity of force driven hardware that they didn't commit a ton of time to searching for replies to current accounting questions. Anderson (2006) agrees when she expresses that costing structures were basically utilized for esteeming and that cost bookkeepers were not engaged with plant task organization. As advantages declined and business ended up being really confounding, more thought must be given to accounting/bookkeeping issues. Finding replies to questions that arose during the costing renaissance at last began the “First Management Accounting Revolution.” A couple of the MA practice were made in light of the leading task completed by Du Pont (1903). At this point, cost accounts for the worker, material, and overheads, as well as financial plans for money and pay, adaptable planning, standard expenses, change examination, move costs, and divisional execution

measures, had shown up (Jones 1995). As managers were continually looking for data to further develop proficiency and productivity, the MA techniques were created. According to Johnson and Kaplan (1987), it took around a hundred years to develop the majority of these techniques. However, various commitments to the field of the MA came from disciplines like financial aspects and design (Parker, 1969). Johnson and Kaplan (1987), call attention to that Hess' commitment would be the most ideal keep going for quite a while as cost accounting/bookkeeping after 1920 turned out to be progressively overwhelmed by the monetary accounting mindset and associations were progressively run by numbers. Johnson and Kaplan (1987) was underline that virtually all MA rehearsals that are still in use were developed in 1925.

The First Management Accounting Revolution (late 1950s – 1980)

As per Epstein and Lee (1999), the main MA revolution called the modern MA period, started in the last part of the 1950s and finished in the mid 1980s. This period was set apart by new examination, because of which accountants gave supervisors new dynamic instruments.

The MA apparatuses laid out during this period, as indicated by Epstein and Lee (1999), reflected monetary hypothesis and depended on the accompanying suppositions:

i. At the administrative and functional levels, assignments are standard.
ii. The external climate (where the organization works) is steady, with few variances in cost or interest.
iii. The MA exists exclusively to help direction.

The Ford Foundation's initiative to restructure management accounting education in the United States was deeply rooted in this "modern" management accounting period (Maher, 2000). Management accounting education was finalized during the “First Management Accounting Revolution, when management accounting was introduced into the curriculum of Master of Business Administration (MBA) students at both Harvard University and MIT immediately after World War II”, according to Maher (2000). During the post-World War II period, new strategies developed from the requirement for dynamic apparatuses to take care of the customary issues of further developed benefit and productivity. These strategies depended on advancements in financial matters and choice hypothesis. Be that as it may, as per Epstein and Lee (1999:2), these

new dynamic devices didn't take outer powers, for example, mechanical change, changes in item interest, or drives by contenders into account. Epstein and Lee (1999:4) presume that the new dynamic devices in MA expected unbounded soundness, limitless information and that the expenses of these examinations for the most part were not exactly the advantages. During the "First Management Accounting Revolution", the first textbook on MA was published. It was written in 1956 by Robert Anthony and focused on the following topics:

i. How to formulate or analyze new problems
ii. Appropriate cost measures

This book by Anthony, alongside a reading material distributed by Horngren in 1962, contrasted essentially from past CA course readings in that it put a lot more prominent accentuation on cost administrations dynamic and opposed to cost-deciding techniques. The two books significantly affected MA instructors (Maher, 2000). During the "First Management Accounting Revolution", the new way to deal with the MA data for navigation led to two significant issues: the immediate costing debate during the 1950s and the science of the MA during the 1960s.

The Direct Costing Controversy

The essential qualification among direct and absorption costing is the recuperation of fixed costs. Fixed costs are apportioned to units really sold in direct costing, however fixed overheads are assigned to all produced units in retention costing (Faul et al., 2001). As indicated by Boer (2000), allies of direct costing refer to various MAP to show that net benefits determined utilizing retention costing produce unreasonable outcomes, while monetary accountants/bookkeepers utilize the matching idea to legitimize utilizing ingestion costing. Parker (1969) proposed a solution by emphasizing the significance of making decisions and the use of different costs for various functions. Maher (2000) then proposed a three-tiered cost classification, namely differential costs, full costs, and responsibility costs. This classification is still used in management accounting courses.

The Mathematics of Management Accounting

A second key issue that emerged during the "First Management Accounting Revolution" was an increased emphasis on mathematics in MA. Mathematics was reiterated as the language of science, and if business school education was to be scientific, management accountants needed to improve their mathematical knowledge (Boer, 2000). Marginal costing, limited incomes, and measurable expense assessments were subsequently integrated into the MA preparing. With its accentuation on direction, the new methodology eclipsed interest in customary subjects, for example, item costing. The "First Management Accounting Revolution" was recognized by the rise of monetary ideas that upgraded conventional MA standards and affirmed that MA had the option to give models and measures to further develop the management direction (Robles & Robles, 2000).

The Second Management Accounting Revolution (1980 – 1999)

The effect of mathematical analysis on the development of the executives bookkeeping has brought about a split among MA researcher (Maher, 2000). Researcher recognized toward the start of the 1980s that the MA educational plan was at this point not applicable to the issues standing up to directors (Epstein & Lee 1999). Leading researcher like Johnson and Kaplan (1987) called for:

i. Growing MA into non-monetary areas.
ii. A superior comprehension of current issues and chiefs' data needs.
iii. Imaginative practice.

The period from 1980 to 1999 was dubbed the "post-modern period" or the "new wave" of management accounting. This period, according to Birnberg (2000), was marked by a transition from a mechanistic view of organizations to recognizing a complex set of organizational interrelations.

Measurement and Control Issues

Epstein and Lee (1999) ordered the progressions that happened during this post-current period into two general classifications: measurement issues and control issues. The MA analysts started to perceive that the creation capability had changed decisively, yet the MA had neglected to address these changes. As per Epstein and Lee (1999), these progressions in assembling innovation were required:

i. New costing models to portray creation processes.
ii. Acknowledgment that new MA framework ventures ought to be financially savvy.

This new advancement perceived the degree to which the researcher were separated from experts' concerns, as well as the degree to which researcher were detached from their own associations (Robles & Robles, 2000). The Management accounting frameworks needed to zero in on the fulfillment of hierarchical objectives (Boer, 2000). Responds to were looked to questions, for example, how workers could be spurred to seek after recognized authoritative objectives. The presentation of the decent scorecard is urgent to the advancement of estimation and control issues. Looking to give answers for the issues the management accountants confronted, new MA reading material turned out to be greater administration arranged during this Subsequent MA transformation (Maher, 2000). A portion of these course readings recommended elective hierarchical designs for current associations (Selto et al. 1995), and others changed their titles from "cost bookkeeping to cost management" (Hansen & Mowen, 2007).

Whatever the case, the "Second Management Accounting Revolution" focused on increasing the accountant's ability to evaluate novel and complex business situations, which had an impact on both practice and research (Epstein & Lee, 1999). History has shown that changes in business will continue to have an impact on the nature of MA. In order to provide accurate data for decision-making purposes, accounting professionals once needed to adapt theirself and their processes in 1999, according to Robles and Robles (2000). (Loft, 1995) separates five methods for examining the development of managerial accounting: Traditional, Neoclassical, Johnson-Kaplan, Work Process, and Marxist are the first five: Traditional Approach - Proponents of the "Traditional Approach" make the argument that one of the key accounting features is continuous development, and that working to improve the methods utilized is the factor that affects the current MA status. This approach is mechanical in nature, and it is also known as a closed, descriptive, functionalist, apolitical, and materialist philosophy system (Puxty, 1993).

Moreover, the neoclassical methodology agreed with the central standards of the customary perspective, yet puts a more prominent accentuation on verifiable examination. This strategy is known for aloof perception of bookkeeping techniques help organizations in gathering their goals. With the exception of (Loft, 1995), and a few different creators, for example, (Kelly and Partt,

1992), the starting points of bookkeeping the executives depend on the neoclassical methodology. Johnson-Kaplan Approach - the MA has lost its importance because the methods used during the 1980s were made before 1925. This approach upholds the appraisal that standard MA doesn't give suitable organization information (Johnson & Kaplan, 1987). Marxist Approach- The communist Methodology contends that the bookkeeping framework is a reasonable component that assists the organization's administration with saving consistently work and assets to make extra monetary worth (Armstrong, 1991). The MA improvement is viewed as a device that suitably disseminates pay and abundance among social classes. Whereas, the "International Federation of Accountants (IFAC, 1998)" recognized four stages in which MA has evolved.

The first stage (prior to 1950), cost determination and financial control - According to (IFAC, 1998), the development of managerial accounting at this phase was geared toward determining issues and potential control of business processes. This period of Management accounting is defined by IFAC as "the technical activity required achieving objectives of the organization" (AbdelKader & Luther, 2006). Before the 1950s, Management accounting (MA) was principally centered on deciding the expense of the item. Creation innovation was generally straightforward, with items going through various distinctive cycles (Lamani & Cepani, 2011). Societies produced generally homogeneous items that consumed similar measure of assets and distinguishing the expense of work and material was simple and the cycles were driven by the speed of manual tasks.

The second stage (1950-1965), the management control and planning - between the 1950s and the 1960s, the essential focal point of MA was to give data on arranging and control issues. This stage is recognized by the utilization of "Traditional Accounting" the executives methods to help independent direction and responsibility bookkeeping. During this time, the MA procedures, for example, "Standard Costs and Profitability Analysis" were presented (Sunarni, 2014). The subsequent stage is characterized by IFAC as "the executives movement, however in the job of staff." During this time, the board was more centered on the organization's creation cycle and inward examination than on methodology and the outside ambiance of business (Gliaubicas, 2012; Kader and Luther, 2006).

The Third Stage (1965 - 1985), decrease of resource waste in business processes - this stage focuses on diminishing wastage of assets in the assembling system by taking out "no-value activities" (Sunarni, 2014). As per (Gliaubicas, 2012), Japan's monetary advancement and the mind-boggling innovative progressions were added to the ascent of worldwide rivalry during this period. The organizations' first concern was to adjust to the new business ambiance. Organizations started to seek after both expense cutting and quality-improvement drives simultaneously. The utilization of mechanical technology and PC controlled processes empowered organizations to work on their quality while likewise diminishing costs as a rule.

Fourth Stage (1985-2000), Value creation through resource efficiency Businesses were forced to concentrate on value creation through efficient resource use during this time because technological modernism was at the forefront and competition was at an all-time high. This was possible, according to IFAC (1998), "through the use of technology that drives businesses to generate customer value, shareholder value, and organizational innovations." Sunarni (2014), the managerial accounting techniques that conquered this period were: activity-based costing (ABC); just-in-time production (JIT); target costing; balanced scorecard; value chain analysis; and strategic management accounting. It ought to be noted, notwithstanding, that while the four phases are particular, the change starting with one and moving onto the next has been transformative. Subsequently, each stage is a crossover of the old and the new, with the old reshaped to work with the now's intention of another arrangement of the managerial circumstances. The MA is seen as a specialized action important for the quest for hierarchical targets in the main stage and as an organizational objective playing out a staff job to help line the executives through the arrangement of data for arranging and controlling in the subsequent stage. The MA is viewed as a key piece of the organization cycle in the third and fourth stages. With further developed innovation, data is currently accessible to all degrees of the board progressively. Thus, the accentuation shifts from data arrangement to the utilization of accessible assets to make an incentive for all partners. The qualification between Stages 2 and 4 is the change in accentuation from data arrangement to asset the executives as misfortune decrease (Stage 3) and worth creation (Stage 4). The accentuation on giving data in Stage 2 remaining parts, however is revived in Stages 3 and 4. Data, as other hierarchical assets, turns into an asset. In Stages 3 and 4, the executives bookkeeping is seen as "a necessary piece of the administration cycle in light of the fact that opportune data is

straightforwardly credited to the board and the contrast among staff and first-line the executives becomes undetectable" (IFAC, 1998). Today, the utilization of assets to make esteem is a significant piece of the administration cycle in current associations (Kader and Luther, 2006). The development of MA apparatuses and techniques mirrors the advancement of the MA. As per Giaubicas (2012), all MA cycles and strategies created in the US, the Unified Realm, and Japan present a brought together image of the MA development.

<Table 3.1 is here>

Management accounting (MA) was criticized in the 1990s for failing to meet the needs of the board of directors during the period 1950-1990. The year 1990 is remembered as a time when the MA faced significant challenges. The MA rehearsals advanced an extraordinary arrangement to endure the extreme changes in the business climate in the last option part of the twentieth century. Many experts advise that MA should be adjusted to changes and business climate requirements. Consequently, many high-level MA strategies have arisen to accommodate the quick and dynamic changes in the business climate.

<Table 3.2 is here>

Concept of modern MA strategies are being used to adapt to complex circumstances, albeit in most non-industrial nations, this can be viewed as a basic requirement for the following time frame because the level of monetary turn of events, even exchange, doesn't give sufficient room to utilize advanced MA methods effectively and precisely, as per contemporary methods to deal with a more noticeable issue. The MA provides policies and procedures to assist all business processes. There is an MA device or method for each option that can be used to make better decisions. MA strategies and methods are used to provide significant data. Be that as it may, MA strategies must be utilized, assuming they are believed to be successful in giving the data expected for productive navigation.

3.3 Management Accounting Research: "Gap between Theory & Practice"

Starting from that responsibility, various scientists have included the opening between academic assessment and practice and, explicitly, they have raised issues concerning its causes (Scapens, 1994). As such, they have perceived that investigation in the field of accounting and the MA is

ceaselessly losing its social significance, and all the while, they have maintained the need to set up methodology to beat this penchant. It should be noted that the confirmation of a certifiable loss of relevance, for instance in terms of impact, of the MA research isn't significantly discussed among specialists. Rather, there appears to be an inexplicable and widespread confirmation that this communication is clear and ongoing. Managerial responsibilities have researched the genuine presence of an opening among speculation and practice, even from an observational perspective. For instance, we have done quantitative assessments to show that academics in the field of board accounting see that their assessments are dynamically losing congruency. Coincidentally, as they underline, their investigation revolves around superior scholastics. In this way, it doesn't consider the experts' view, which would be vital to show that a veritable opening between speculation and practice exists. The researcher perspective has been taken on by Tucker and Schaltegger (2016), who, in their outline, contrast the impressions of specialists of Australian and German accounting stakeholders concerning the opening among speculation and practice. The creators display that the meaning of focusing and communicational issues tends to two of the fundamental obstacles with the impact of MA research. Van Helden and Northcott (2010) examine the consistency of public area research by isolating examination distributed in worldwide accounting diaries to decide if their centres are designed for enlightening practice. Essentially, their disclosures hold up the probability that the level of bearing towards useful issues is extraordinarily restricted, and, notwithstanding, when practical repercussions are seen and conveyed, this doesn't quick track the game-plan of unequivocal principles obliging to specialists.

However, the vast majority of the surviving writing has focused on factors that determine the inadequacy of the MA research. The irregularity of the object of exploration is cited as one of the most compelling According to Shapiro et al. (2007), the MA specialists appear to become disoriented prior to interpretation. Finally, they fail to investigate peculiarities that are important to specialists. This assessment is shared by a large number of researchers. Illustration on work by Modell (2014) highlights the MA analysts' proclivity to focus on creating complex hypothetical commitments rather than investigating rational thinking and specialized issues that would be useful to professionals. Similarly, Mitchell (2002) asserts that MA research necessitates specialized wealth due to the excessive importance that researchers place on its social aspect. Surprisingly, Malmi and Granlund (2009) contend that the emphasis on friendly perspectives associated with

MA frameworks is the result of a proclivity to decipher preconceived hypotheses instead of accounting eccentricities as a justification for figuring out what could be of interest and, in this manner, what ought to drive an assessment. This is in accordance with Hopwood (2008), who brings up that “often method-led and seemingly subject to waves of fashion, the dynamics behind the development of the accounting research agenda appear to be internal to the academic community itself rather than being influenced by the shifting concerns of practitioners, regulators, or even the public at large.” By and large, beginning from the supposition that the impact of MA research is reliant upon its capacity to be connected with what bosses do (Jönsson, 1998) and consequently with what they consider significant, it very well may be contended that one of the huge reasons for essential loss of significance lies in the inability to portray research questions that are as per what experts expect from research. Baldvinsdottir et al. (2010) state that this is impressively astonishing and puzzling, expecting we look at the fortifying of studies that, lately, have embraced trial and error to examine quirks in the field of the MA. Besides being lost before cognizance, the MA research has uncovered that the makes key its absence of consistency can likewise be tracked down in the scientists' powerlessness to enough give to subject matter experts, explicitly in how they are likewise lost in interpretation, and that his eroticism happens each time specialists negligence to introduce their exposures in a manner that is reasonable for prepared experts or when they don't really focus on the obligation. Inanga and Schneider (2005) guarantee that the correspondence issue emerges even before the design of a paper for a diary. Much more unequivocally, they underline that the setback of correspondence among researchers and among researchers and experts is a cut-off to the improvement of huge, i.e., basic, research.

Despite perceiving that a correspondence issue exists, experts appear to not have the option to make their investigation revelations charming for specialists or to talk with them (Bromwich & Scapens, 2016). Sometimes, this is a consequence of specialists' curiosity toward quantitative and quantifiable strategies, for instance, which are routinely used to isolate and decipher peculiarities in the field of accounting and the pioneers' accounting. Besides, the way that MA research has become never-endingly interpretative as opposed to overseeing has made it less reasonable for experts who routinely have a particular or sensible, planning (Chalmers and Wright, 2011). As demonstrated by Mitchell (2002), these movements that occurred regarding the board accounting research have caused “semantic and grammatical hindrances” among subject matter experts and

experts, taking into account that the last choice much of the time doesn't have a palatable establishment to totally understand and esteem the responsibility, especially the speculative one, given by an assessment study. Hopwood (2008), who recommends that, researcher was develop showing and communicational abilities to really be connected with the universe of planning. It ought to likewise be seen that scientists are generally lost in understanding (Shapiro et al., 2007) taking into account how they are obliged by diaries to take on a language that, as per Chapman and Kern (2012), regularly goes close by estimating. These makers similarly recommend that zeroing in on unambiguous journals for experts would help with growing the significance of the leaders' accounting research since, in this present circumstance, researchers would be drawn nearer to embracing language that is more in line with their suspicions as well as the underpinnings of specialists. The loss of relevance of studies, according to the literature, can be traced back to a lack of collaboration between academics and practitioners in the field of MAP. Cooperation extends beyond simple communication by establishing a relationship with the goal of collecting, discussing, and interpreting data throughout the research process. As per the writing, the shortfall of specialists' contribution in the exploration cycle would restrict the commonsense importance of MA research. Specifically, Mitchell (2002) obviously expresses that: “academics can improve the attractiveness of their research for practitioners by working more closely with them throughout the research process and the practitioner can become an integral partner in research work and can therefore help in focusing it on issues of practical importance.” It is not necessarily the case that analysts ought to give up their jobs as autonomous and basic subjects in the exploration cycle (Parker et al. 2011). Rather, they ought to start to participate in discourse with professionals, as well as industry and specialists, to deliver applicable exploration yields (Hopwood, 2008) taking consideration not to fall into what Al-Htaybat and von Alberti-Alhtaybat (2013) allude to as the consultancy trap. Albeit an absence of solid participation among specialists and professionals can be perceived as one of the reasons for the MA examination's deficiency in importance, writing has likewise stressed that this idea of information co-creation is hard to apply practically speaking due to the previously mentioned open hole. As a matter of fact, since professionals and scholastics communicate in various dialects and the previous are not used to utilizing the devices, strategies, and methods expected to direct scholarly examination in the field of the MA (Chalmers & Wright, 2011), a continuous coordinated effort could be hazardous. The reasons for the MA investigation's lack of significance also concern how the investigation is conducted, specifically the strategic

methodologies and techniques used to research the MA frameworks and their recommendations. The gap between hypothesis and practice in 1980s MA research was perceived to be bridged by exploring MA practice and how they function within associations (Scapens, 2006). As per this perspective, the MA exploration's failure to be significant was principally credited to the propensity to foster complex numerical models pointed toward making sense of contrasts among the MA rehearsals (Scapens, 2006) as opposed to concentrating on it in the setting in which it worked (Flamholtz, 1983; Hopwood, 1983; Laughlin, 1988).

In order to address this situation, qualitative methods gained popularity in the 1990s. Case studies, in particular, demonstrated their full potential for ensuring a thorough examination and understanding of MAP and their implications. Case studies, which allow for the analysis of reality as well as an understanding of the "antecedents and consequences of managerial accounting practice," should have been used to make management accounting research more relevant. In this regard, they should have contributed to closing the theory-practice gap, making MA study quite relevant to professionals. To address this situation, qualitative approaches began to gain popularity in the 1990s. Contextual analyses, specifically, exhibited their maximum capacity for guaranteeing an inside and out examination and appreciation of the MA rehearses and their suggestions (Parker, 2012). Case studies should have been used to improve the relevance of management accounting research because they allow for the analysis of reality and the comprehension of the "antecedents and consequences of managerial accounting practice." They should have helped to close the theory-practice gap, making management accounting research more relevant to professionals. The reasons can be found in what Baldvinsdottir et al. (2010) call a shift "from a predominant focus on the technical to a primary emphasis on the social," manifested in the use of complex sociological frameworks to analyse empirical data. Thus, MA study is a long way from being cantered around specific items of common sense Modell (2014), and the language utilized by the people who ought to be its buyers is poor, in any event, when in light of the utilization of techniques are so firmly connected with the real world, for example, the contextual analysis strategy.

Finally, it ought to be noticed that the writing has featured the deficiency of significance of MAP because of exogenous factors, for example, government-embraced frameworks to evaluate the nature of exploration directed by colleges and examination. Ter Bogt and Scapens (2012) exhibit how the presentation of new estimation frameworks that are more arranged toward quantitative

investigations can influence college execution. The researcher analyzed the presentation estimation frameworks utilized in the bookkeeping and money bunches at the colleges of Groningen (Netherlands) and Manchester (Britain) (UK). As indicated by observational proof, the utilization of quantitative frameworks causes vulnerability and nervousness among analysts. Besides, the discoveries uncovered a connection between the utilization of diary rankings, which is normally connected with the reception of quantitative frameworks, and researchers distributing their work in just few standard diaries, restricting the capacity of their examination to make a commitment to society. This is reliable with the contention made by Chalmers and Wright (2011) that satisfaction and assessment frameworks discourage correspondence among scholastics and experts by expecting specialists to distribute in peer-explored diaries that are just perused by scholastics. All in all, since the amount and scholarly nature of examination are inseparably connected to the number and scholastic nature of exploration items, scientists are committed to expand their presentation and distribute their papers in scholarly diaries that can further develop they're in general, yet these works don't provoke the curiosity of professionals. Mitchell (2002) makes a similar point, stating that scientists are constantly compelled to distribute in order to establish research notoriety. To achieve this, they are more focused on distributing for different scholastics, explicitly in scholarly diaries, since this is the speediest method for acquiring scholarly affirmation and, thus, a scholastic vocation. Likewise, Hopwood (2008) has expressed that the quest for a scholarly vocation puts tractable weights on scientists to help the quantity of articles they distribute, which frequently diminishes the quality, and subsequently the effect, that they can have on society (Gendron, 2008). To sum up, the writing in the field of MA has really focused on what seems to have added to the formation of a hole among hypothesis and practice, particularly those factors that have restricted the effect of MA research. This exploration has been instrumental in creating methodologies to conquer the obstructions that forestall the MAP from turning out to be more viable (Bromwich & Scapens, 2016).

3.4 Research into Management Accounting Practice

Management accounting practice, as per Ittner and Larcker (2002), are various techniques planned explicitly for assembling organizations to help the association's foundation and the MA processes. Planning, execution assessment, and giving data to navigation and key examinations are instances of the MA rehearse. The MA is a part of bookkeeping that creates data for chiefs and is a

fundamental part of an association's essential interaction. It is the most common way of distinguishing, estimating, gathering, dissecting, planning, deciphering, and imparting data that helps supervisors in gathering hierarchical objectives (Hilton & Platt, 2011; Horngren et al., 2002). As per Rufino (2014), MAP are MA procedures or strategies utilized in begetting business choices in any association's benefit or non-benefit exercises. Despite size, market, or activity, each business association should execute MAP. In light of their perplexing business exercises and activities, administration, promoting and endlessly producing organizations receive the most rewards from the MA. Taking on powerful MAP by assembling firms is an undeniable method for moving toward contest, change, and cost provokes to further develop execution. The MA practice and methods help directors in associations, including producing firms, in arranging, coordinating, and controlling working expenses and accomplishing max execution (Gichaaga, 2014).

Furthermore, MAP differ across countries, influenced by each country's environment and organizational structure. According to Gichaaga (2014), management accounting practice (MAP) can include, among other things, performance evaluation, budgeting, strategic analyses, and decision-making information. They assist management in gathering the necessary data to make sound decisions (Alleyne & Weekes-Marshall, 2011). Moreover, MAP help associations in leftover cutthroat and staying aware of the impacting scene by giving a significant upper hand to associations to direct administrative activity, persuade ways of behaving, and uphold and make the necessary social qualities to achieve their essential targets. Organizations survey their activities utilizing the MA and different techniques and instruments (both conventional and current). These methodologies help them in arranging, organizing, and controlling working costs to meet their goals. It is generally recognized that MAP is basic to an organization's prosperity (Ahmad, 2014; Ahmad & Leftesi, 2014). The MAP has integrated monetary and nonfinancial methods and give data at both the functional and authoritative levels, including elements like contests related to ecological vulnerability, fabricating climate innovation, and business society. Most organizations assess their activities using the MA framework. Planning, fluctuation investigation, and breakeven examination are instances of these. These strategies assist organizations in organizing, coordinating, and controlling working costs in order to achieve productivity. Viable MA rehearsals filter the hierarchical setting while also providing additional information from that climate setting to the board in order to work with direction and accomplish upper-hand tasks and change (Smith,

2009). Managers must change management accounting due to significant challenges and pressures (Ahmad & Leftesi, 2014). According to Abdel-Kader and Luther (2006), can include costing systems, budgeting, performance evaluation, decision-making information, and strategic analysis. These alternative techniques have improved the fundamental principles of management accounting, adding value to a wide range of practice (Ittner & Larcker, 2001).

3.4.1 Management Accounting Practice in Developed Countries

In the US, Europe, and the Asia-Pacific region, research has been done in developed nations. Examples of literature in each country are reviewed in the following subsections:

European Research

Abdel-Kader and Luther (2006) accomplished a survey on MAP in the food and beverage industry in the United Kingdom, the review found that immediate costing is broadly utilized and significant. Regardless of their limits, conventional spending plans keep on being a mainstay of focal MA and are much of the time utilized in examinations. The association's exhibition and other non-monetary assessment measurements are viewed as significant, yet 40% of organizations never or seldom use them. Item benefit examinations are every now and again utilized, and, shockingly, the greater part of the populace ascertains the productivity of providing individual clients. Respondents had misgivings of perplexing DCF speculation evaluations. The authors presume that conventional MA is as yet fit as a fiddle, but there are suggestions of expanded utilization of: data about the expense of value; non-monetary measures of workers; and investigations of contenders' assets and shortcomings. There was yet more evidence of a gap between current reading accounting practice. Adler et al. (2000) chose 165 New Zealand manufacturing companies to investigate the extent to which advanced MAP techniques have been accepted by New Zealand manufacturers and potential barriers to their wider adoption. The results strongly suggested that advanced methods are continuing to be used more and more in combination. The majority of manufacturers still use traditional accounting methods like cost analysis, standard costing, and others. Larger businesses, according to the researcher, are more likely to employ sophisticated management accounting methods. They also identified the country's human resources as the most significant barrier to the

adoption of new accounting techniques. Organizations that used sophisticated management accounting practice saw an increase in product profitability, reduced costs, and improved quality.

<Table 3.3 is here>

Drury et al. (1993) covered MAP in UK manufacturing companies and found a wide range of practice were utilized. Following that, different scientists led research on MA rehearsals in other European nations. Penetrate and O'Dea (1998) examined a large number of MAP, including costing, arranging and controlling, executing estimation and assessment, and using dynamic frameworks. Bruggeman et al. (1996), for instance, researched the utilization of in Belgian firms. They found that customary methodologies were all the while being utilized, regardless of the way that organizations had started to embrace new strategies like ABC. Penetrate and O'Dea (1998) researched among Irish accountants and tracked down those customary procedures (monetary proportions of control and execution assessment) kept overwhelming MA frameworks, while the update of additional cutting-edge strategies (ABC and target costing) was by and large low. This suggests that the essential commitment of more up-to-date strategies might be to enhance, as opposed to supplant, traditional methods.

The U.S. Research

Chow et al. (1988) led a survey of past examinations on in the US. The CA framework plan, navigation, improvement, control, and the utilization of quantitative techniques were totally canvassed in the overview. While numerous famous techniques were distinguished, the scientists reasoned that there are regions where methods veer. Safeguards et al. (1991) abbreviated the MAP in the US and Japan and found numerous likenesses and qualifications in the utilization of the MA by Japanese and US organizations. The utilization of capital planning choice models is perhaps of the most broadly announced distinction among Japanese and American firms. Firms in the US every now and again utilize limited income models like net present worth and interior pace of return. Interestingly, Japanese firms involved restitution as their essential model all the more regularly.

In Australia, Smyth (1960) contrasted Australian MA procedures and those of the US and Canada. He observed that Australian chiefs were less inclined to involve MA strategies than supervisors in

the US and Canada. For instance, Australian organizations are less adequate than US and Canadian organizations to embrace long haul plans for long haul deals plans, ventures, money and profit, and planning. Australian firms had a relatively high acceptance of MA methods compared to other countries. On average, his traditional MAP acceptance rate is higher than the current technology acceptance rate. Budgeting, planning, and performance evaluation showed higher support. Target costing, value chain analysis, and ABC have slightly lower tolerance levels. Wijewardena and De Zoysa (1999) studied MAP at major manufacturing companies in Australia and Japan. The discoveries uncovered various significant dissimilarities between the two nations. The most prominent distinction is that Australian organizations' MA centers around cost control devices, for example, fabricating planning, standard costing, and fluctuation examination, while Japanese organizations center around assembling cost arranging and targets. Alleyne and Weekes-Marshall (2011) investigated the MAP of three of his manufacturing companies within a publicly traded company in Barbados. This study was qualitative in nature. Semi-structured face-to-face interviews were conducted with 9 people from 3 companies. The researcher tried to identify various issues through his research. Respondents agreed that MAP provides management with relevant information to make meaningful decisions. The survey found that the sample companies were widely distributed across most of his MAP, preferring traditional management accounting practice. In particular, you could pick the choice about whether to utilize specific MAP. For the expense approach, the partition of variable expenses, steady expenses, fixed costs, the utilization of broad above rates, and departmental or multi expansive above rates were generally regularly utilized, and costing and relapse were performed. The learning curve technique was not widely used. For budgeting approaches, budgeting for cost plans and control, what-if analysis, zero-based budgeting, and budgeting for long-term (strategic) planning have been the most common methods. Regarding performance evaluation, financial and non-financial indicators and benchmarks were examined as the most common management accounting practice in this sample area. Cost-benefit analysis is widely used in decision-making approaches (Dick-Forde, 2007). Also, in terms of strategy analysis, the methods used in all of the samples were industry analysis, competitiveness analysis, product lifecycle analysis, and competitor strengths and weaknesses analysis. In addition, the survey found that, of the five dimensions of management accounting practice, respondents considered strategic analysis to be the most important practice for listed Barbados companies, limited liability manufacturing groups. The study identified several factors as important in

influencing the choice of management accounting practice, including timeliness, technology, persuasiveness, need for information, and adoption of best practice; All respondents to the survey agreed that the MAP used by the sample companies were critical to their company's success and helped management make informed business decisions. Furthermore, the etiquette was consistent with those of the group's other companies.

Asia-Pacific Research

In Japan, Scarbrough et al. (1991) recognized a few significant Japanese utilized in cutting edge production factory automation (FA) fabricating conditions. The examination found that Japanese MA frameworks for item evaluating, and stock valuation don't utilize a fresher or more imaginative methodology than those utilized by producers. All things considered, organizations appear to have emptied their re-established endeavours into cost examination for independent direction and cost control through selective MA methods like costing, improving technical performance, and targeting costs (e.g., "total quality control (TQC), total control output (TPM), just-in-time (JIT), value engineering (VE), and return on revenue (ROS)"). Improvements there give off an impression of being painstakingly coordinated and upheld by a more extensive arrangement of activities or vital frameworks (e.g., interests in plant and gear). Scientists have found that administration endeavors become zeroed in on characterizing and conveying authoritative objectives and techniques as opposed to planning complex frameworks that reflect individual attributes. Later, Yoshikawa (1994) emphasized several important aspects of the Japanese MAP that differed from those found in the West. The differences tend to reflect traditional Japanese culture. In Japan, whenever possible, MA is used in a way that encourages employee participation through consulting. Management accounting is about improving the visibility of employees by educating and reminding them of their strategic goals and business direction so that they can contribute as much as possible to the company. The adequacy of MAP in helping firms accomplishing their objective has become significant exploration subject. As MAP are ventured to give significant data to the present association, the examination of the experimental confirmations on MAP viability in upgrading business execution ought to be completed. There are considerable endeavors have been finished in estimating the impacts or the relationship of MAP and performance of a firm. The earlier examinations analyzed individual MAP region (like PMS, BSC and ABC) and execution in view of monetary or emotional rules. A prior study should be

visible in Dealer (1981) who investigated an association between planning rehearses and the relationship with efficiency. Explicitly this study zeroed in on the technique for the firm to planning in light of formal authoritative methodology and the relational methodology and their associations with company performance. The outcomes exhibited that the managerial way to deal with planning has areas of strength for a superior presentation in huge firms. Inside more modest firms, a more relational way to deal with planning is more connected with hierarchical execution. Then, Reid and Smith (2000) in an investigation of UK SMEs observed that the effect of the MAS. The respondents will generally put less significance on the arrangement of the MA data when their monetary presentation is satisfactory. Most proof shows that Japanese and Western MA strategies and techniques are very comparable. What really changes between the two nations is how these strategies are applied and the setting in which they are utilized. The five repeating research subjects (as previously mentioned) provide a structure for Japanese firms to use MA procedures to gain an advantage. Wu et al. (2007) was designated as in Chinese organizations and led a study in neighbouring public offices (%) and internationally as joint ventures. Study results show that the Chinese language associations that participated in unfamiliar collaborative joint endeavours rolled out additional improvements to their MA gadgets, as contrasted with comparable PCs that had no cooperative endeavour activities with foreign organizations. Islam and Kantor (2005) found that cross country ways of life and values rehearsed for millennia by Chinese language organizations affected the results of endeavors for additional information transmission and the improvement of MAP, they guaranteed that a shortage of Western MAP expertise had decelerated the pace of headway of Chinese-language. Wu et al. (2007) found that the degree of MAP reception was most persuaded by the association's proprietorship type joint endeavor (JV) or state-owned enterprise (SOE) as opposed to the idea of the MA procedures to be utilized. Systems, for example, planning and objective costing seem, by all accounts, to be more gainful to SOEs than JVs. Notwithstanding, obligation endlessly representing navigation are seen as being less valuable to SOEs than JVs.

3.4.2 Management Accounting Practice in Selected Developing Countries

Nigeria

Ogungbade & Oyerogba (2020) examined the effects of firm culture on MAP among manufacturing firms in Nigeria. In the twenty-first century, traditional MAP has come to be

irrelevant and unreliable for commercial enterprise environments. The reasons behind the failure of conventional MAP to provide dependable facts for control to make a knowledgeable choice can be categorized as: adjustments in inner and external business environments, market competition, the production era, firms' methods, and firm lifestyles. Right here, the writer decided on seven dimensions of company cultures and 15 contemporary control accounting techniques over five years (2011–2015). Because they investigated the effect of lifestyle on MAP selection and MAP are a specific variable, a logistic regression model was developed, indicating a linear relationship between company lifestyle and management accounting practice. This study observed that manufacturing businesses in Nigeria exercised a few present-day MAPs for the duration of the period. The procedures incorporate side interest-based costing, action based planning, and leisure activity based absolute administration, objective costing, top notch costing, item benefit investigation, esteem chain assessment, and benchmarking. Moreover, a couple of practice, similar to life cycle costing, just in-time accounting, back flush costing, adjusted scorecards, and kaizen costing, had not been rehearsed in that frame of mind of the period. The investigations reasoned that firm custom sizeably affects the decision of the MAP.

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Agboola & Salawu (2012) conducted a survey of ABC adoption among Nigerian manufacturing companies. As per the review, conventional techniques for allotting above were believed to be ineffectual concerning working on worldwide seriousness. Moreover, 60% of respondents have clinched ABC because of extended product offerings, expanded contest, and expanded above. ABC is commonly known and utilized in assembling, with the greater part of the example being known about it. The expense and intricacy of performances were referred to as the essential purposes behind non-reception by 40% of respondents. Nonetheless, the expense of carrying out ABC was restrictively costly for limited scope fabricating. This outcome could be made sense of by the way that bigger firms are bound to have a different blend of items or administration that makes ABC invaluable. Accordingly, the review suggests that organizations that poor people squeezed ABC because of the significant expense of execution consider doing so on the grounds that the advantages will offset the costs over the long haul. It supports the distinguishing proof of

wasteful items, divisions, and exercises, as well as the portion of additional assets to beneficial items. Finally, senior management should lend their full support to the implementation and success of ABC.

Ghana

Mbawuni and Anertey (2014) conducted their research to investigate the use of a wide range of MAP by Ghanaian telecommunications companies. Simultaneously, the creators tried to learn the degree of purpose and explanations behind the reception of MAP in Ghana's versatile telecom industry. It was a cross-sectional overview where 29 MAP were perceived across five primary aspects: costing framework, planning framework, execution assessment, connected with process data, and key examination. The results revealed that, of the five dimensions, the most commonly used category of MAP in Ghana was Strategies analysis practice. Their next option was a budgeting system. MTN relied on financial rather than non-financial measures in Ghana. MTN Ghana also made limited use of the costing system. In Ghana, there is a favorable attitude toward MAP in terms of ensuring a firm's efficiency and effectiveness, as well as improving performance. Another reason was global competition, rising costs, and economic crises.

<Table 3.6 is here>

Kenya

Waweru's (1999) study looked at the management accounting methods and procedures used by publicly traded companies in Kenya, as well as the types of MA reports generated and the frequency with which they were produced. The concentrate additionally investigated the MAP utilized by these ventures and the degree to which they were utilized. The examination was an evaluation of all public corporations in Kenya. Data was gathered utilizing a semi-subordinate survey and broke down utilizing tables, extents, mean, and hypothesis. The discoveries, in any case, uncovered that there was no broad relationship among the sort and technique for planning and the belonging and area of the association. The most important reason for MA reports became planning and management. The vast majority of the MA reports are created from month to month. There will never again be a huge gap between the MA ideas and the MA practice. In any case, there's boundless use of quantitative MA strategies in Kenya. There might be an inclination toward

simple MA strategies for the confounded methods. This may be a direct result of the cost stress and the intricacy of those hazardous strategies, which may further offset their advantages.

<Table 3.7 is here>

Later, Waweru et al. (2004) analyzed control accounting trade over time inside four African retail companies and located full-size modifications in MA systems in the four cases. Such changes include the expanded use of present-day MAP, which drastically reduce ABC allocation systems, and the balanced scorecard (BSC) for performance measurement.

<Table 3.8 is here>

Njenga (2006) investigated the relationship between cost efficiency and financial performance of corporations listed on Kenya's forex market. They inspect the discoveries and infer that expense X-inefficiency can likewise emerge on the grounds that supervisors utilize more contribution than a high-work-out firm or on the grounds that they utilize an information mix that doesn't bring down incentive for a given enter vector; additionally, fee X-inefficiency is caused by the fact that “neither people nor firms work as hard, nor do they search for facts as efficiently, as they could.” Particularly the impacts that cost X-performance on the grounds that the proportion of the negligible costs that may be exhausted to deliver a given result complete bundle to the genuine expenses consumed changes somewhere in the range of nothing and 100 percent. The 46 associations and associations recorded inside the Nairobi Protections Trade formed the noticed populace. The example remembered organizations for the accompanying areas: farming, vehicles and frill, banking, business and contributions, creation and partners, energy and petrol, protection, and subsidizing organizations. The discoveries of the resource the executives estimates show how proficient control utilizes a company's resources for create deals throughout a specific time period. Resource the board proportions (resource usage proportions) show how effectively and seriously assets are utilized to make pay. These proportions incorporate, for instance, stock turnover, receivable turnover, and resources. Besides, the discoveries demonstrated that offer resources for further develop their working presentation are normally bad entertainers. Firms are to sell their own resources assuming they find that open door subsidizing is basically excessively costly,

suggesting that overall property, the worth of crude fabric, and deals expenses fundamentally bring about better firm execution.

In addition, Gichagaa (2013) observed the "consequences of management accounting practice on the economic performance of manufacturing companies in Kenya" and researched the effects of control accounting practice on the economic performance of producing agencies in Kenya. This observer adopted a descriptive survey layout. The 455 Kenyan manufacturing groups were chosen as the study's target population. According to the findings, costing structures are widely used. The cost structures are protected: cost of best, departmental overhead costs, separation of expenses, ABC, target charges, regression techniques, and/or gaining knowledge of curve techniques, respectively. Furthermore, it was found that planning rehearses were profoundly utilized in the respondent's associations. They examined planning for long haul (smart courses of action, zero-based thoroughly planning, planning for cost control, bendy planning, planning with “consider the possibility that assessment,” planning for arranging, and planning. Generally speaking execution evaluation measures have moreover been viewed as especially utilized in the respondent's organizations. They covered non-monetary measures connected with clients, non-financial measures, and benchmarks. The investigation discovered that information for decision making was utilized in the respondent's groups. These include an evaluation of primary capital funding primarily based on discounted coin waft technique(s), an evaluation of primary capital investments, and a value-extent-earnings evaluation (wreck-even analysis) for the most important product. Strategic analysis is becoming more popular within the respondent's businesses. The spectator reasons that realities for choice making rehearses are the most normally involved MAP among the creating partnerships in Kenya, joined by methods of vital examination, planning, execution appraisal, costing, size, and influence, separately. The concentrate further presumes that the main components of the MAP among the assembling organizations in Kenya are that the MA capability recognizes key execution factors as well as unsafe regions that require improvement. The MAP has expanded the profit from value (net income/average equity). The administration bookkeeping capability thinks up procedures that permit producing organizations to exploit monetary developments to acquire an economical upper hand. The MA gives data from its current circumstance to the board to work with navigation and ROA ((net income/total asset) because of the utilization of the MAP

Middle East

Alnamri (1993) who directed a near examination of Saudi and western methodologies found that the western joint endeavor organizations have a more complex MAP and their accountants play a larger part to play in navigation and control. Furthermore, the chiefs of the joint endeavor organizations depend more on accounting data in navigation and control contrasted with their Saudi partners. El-Ebaishi et al. (2003) noticed a scope of the MAP utilized in Saudi assembling organizations. The execution of standard costing framework was over portion of the respondents (57%) showed utilizing this strategy; by far most of the clients (91%) utilized as of now feasible norms; 93% of the clients reported surveying their guidelines; lastly, 38% of the clients guaranteed to continuously compute differences. The scientists took the view that by expressing that an organization registers fluctuation for cost guidelines doesn't be guaranteed to prompt updating them. In regard of the planning framework, Saudi organizations showed a high execution level of various spending plans as follows: 74% utilized an expert financial plan, 77% arranged a creation spending plan, 76% a money financial plan, 75% a deals financial plan, 68% an immediate material financial plan, 58% an immediate work financial plan and, at long last, 61% carried out both above and capital financial plans. The specialists deciphered these discoveries based on the exploration setting, for instance, they ascribed the way that creation financial plans were not executed by all organizations in light of the fact that such financial plans are generally connected with enormous manufacturing organizations which was not the situation in this review. At long last, 60% of the clients professed to change their spending plans with 48% of them led that modification every year, 23% semi-every year, 13% quarterly, lastly 5% month to month. Finally, as far as the presentation estimation, the respondents reported utilizing fluctuation examination of standard expenses for assessing their performance also; they utilized liability accounting in cost habitats (58%), income focuses (38%), and benefit focuses (27%).

Libya

In Libya, Kalifa et al. (2020) have done their study on Libyan oil companies to describe the evolution stage and the practice of MAP specially the use and benefit of TMAP & CMAP. The 24MAP items in the questionnaire were developed based on Luther and Longden (2001) where the MAP was arranged according to IFAC-Based Model. The authors found that Libyan oil

companies used different types of TMAP and thy preferred TMAP than CMAP. But the authors opinioned that there exists significant progress to think about the completion and the use of CMAP since CMSAPs were more beneficial than traditional MAP. As per Rufino (2014), MAP are MA apparatuses or strategies utilized in begetting business choices in every business exercise of any association, benefit or non-benefit. Each business association should embrace MAP no matter what the size, market and activity. Among these kinds of business tasks, administration, marketing and endlessly producing business boost the most benefits of the MA due to their complicated business exercises and activities. Besides, MAP is different across the nations, impacted by every nation's current circumstance and association.

Turkey

Kamau and Kariuki (2016) have done their review to delight the MAP of the food and refreshment, particularly cheap food business working in Konya, Turkey. In this specific situation, the creators included 38 MAPs under 5 aspects, like the costing framework, planning, execution assessment, data for navigation and vital examination. The overview technique was utilized to gather information where the review information was gathered through up close and personal meetings with the directors of 37 cheap food businesses working in Konya. Inside the aftereffects of the review, the creators tracked down that in Konya, the quick - food business were all the while involving the customary MAP as a component of the MAP and attempting to coordinate a portion of the cutting edge or key administration rehearses into their organization processes. Ali (2010) conducted his research on manufacturing companies in Istanbul, Turkey, to explore the cost and management accounting practice utilized by these companies. Through his study, he attempted to find out some ingredients that are available in cost and MAP, like: product costing method, difficulties in product costing, overhead allocation base to calculate product cost, application of costing information, and the perceived importance of management accounting practice. Based on previous research, the author created the questionnaire survey content to collect data from 61 businesses, including both small and medium-sized enterprises and large corporations. The research revealed that the most widely used product costing method in Turkey, especially in Istanbul, was job costing. As per the respondent's viewpoint, the most noteworthy positioning trouble in item costing was the intricacy of the creation cycle. In Istanbul, the most generally utilized above portion bases were prime expenses, units delivered, and direct work costs;

estimating choices were the main region where it was utilized to cost data. The exploration observed that the main three MAP were planning, arranging and control, and cost-volume-benefit examination. As per the creator, diminishing benefit, inflating expenses, and contest during the financial emergency affected the apparent significance of cost accounting in Istanbul. The discoveries show that organizations see conventional MA devices as still significant. Be that as it may, new MAP, for example, essential preparation and move estimating are seen as less significant than conventional ones.

<Table 3.9 is here>

Egypt

As per Abdel-Maksoud (2011), the connections among level of execution of different MAP computerized manufacturing techniques (CMTs). On one hand, and levels of organization of manufacturing sector in Egyptian manufacturing firms on the other the investigation discovered that critical positive relationships exist between level of performance of sprite and levels of sending of AMAP in the reviewed Egyptian firms. That's what also the creator referenced on the off chance that size, industry area and region can be controlled these critical relationships even get more grounded. This study utilizes the cultural methodology utilizing Hofstede's four components of the social direction of a country, to foster speculations in regard to the decision of the executives bookkeeping rehearses utilized by Egyptian associations. Hofstede fostered a list to address every one of these four aspects for fifty nations. Egypt scored as having a serious level of force distance and vulnerability evasion and a low level of independence and manliness. A questionnaire was created concerning the utilization and advantages got from 42 MAP; a pilot study was done, and the last review was directed by private meetings of senior monetary directors of manufacturing organizations recorded on the Egyptian forex market. Results show that Egyptian manufacturing associations hold and have faith in the advantages got from involving conventional MAP as they fit well with overseeing in a shaky economy.

<Table 3.10 is here>

Nonetheless, results likewise show that Egyptian supervisors have begun perceiving the advantages of a portion of the further developed MAP. There is little testimony and a general absence of information about the ongoing reception of MAP in Egypt which might restrict the possibility to further develop it. Also, there has been next to no consideration paid to the significance of MAP and the boundaries of its execution in Egypt (Farouk and Bose, 2012).

<Table 3.11 is here>

South East Asia

Sunarni (2013) has done his study to explore the present status of management accounting practice in Yogyakarta's manufacturing companies. Utilizing accommodation examining, the creator chose 46 assembling organizations all through Jogyakarta, that comprise of 30 medium-scale organizations and 16 major scale organizations to quantify whether the MAP, the job of the MA and the elements driving the progressions are different between the two gatherings. For the review reason, the creator utilized two factors to gauge MAP, and they are - the MA assignments and the MA apparatuses/methods. As per the creator, the MAP in Yogyakarta's assembling organizations were overwhelmed by customary MAP, on the grounds that the conventional MA devices were seen more significant as opposed to the contemporary ones. Here, medium companies preferred profit improvement where big scale companies selected budgeting as vitally important management accounting tasks. The research found that in Indonesia, there was a significant difference between big-scale companies and medium-scale companies in case of MAP. The main three MAP for medium scale were spending plan, absolute quality administration and cost fluctuation examination where the main three for enormous scope organizations were spending plan, Cost change investigation and standard costing. The creator additionally prescribed that to upgrade the nature of the MA data; the organizations ought to improve the utilization of contemporary or high level MA instruments. Ahmad and Alwi (2004) did their review to look at the degree to which customary and contemporary MA apparatuses are being utilized in four Asian nations: Singapore, Malaysia, China and India. Through a writing survey, the writers gave a near examination of the MA strategies utilized in the four nations. For the study purpose, the authors considered budgets, standard costing and CVP analysis as Traditional Management Accounting Practice while ABC, target costing and the balanced scorecard (BSC) as Contemporary

Management Accounting Practice. The authors found that “Traditional Management Accounting Practice” were less suitable at today’s business arena. According to them, Contemporary Management accounting practice was perfect for manufacturing organizations in this dynamic business environment because they could greatly enhance corporations' abilities to meet global competition. The authors remarked that in Asia, especially in Singapore, Malaysia, China, and India, traditional MAP were highly and strongly used by the manufacturers, and they paid less attention to contemporary management accounting practice. The malpractice of contemporary MAP may be the lack of awareness of new techniques, the lack of expertise, the lack of top management support, the high cost of implementation, being quite conservative and avoiding risks, being less innovative, and finally, having “no reason to change” from the traditional technique to the new tools. Phadoongsitthi (2003) revealed that for Thai organizations in the manufacturing and administrations areas the reception of planning, arranging and recital assessment rehearses was high yet the reception of contemporary methodologies, for example, target costing, item life cycle examination and zero-based budgeting (ZBB) was low. The outcome is like those laid out in Singapore and India (Joshi, 2001).

Other Developing Countries

Ashfaq et al. (2014) examined the management accounting practice and its level of usage in services sector of Pakistan especially in banking, insurance and telecommunication companies. In this exploration there were 27 MAPs that have been distinguished for examination. The levels utilized already by Abdel-kader and Luther (2006) in their review. The scientist found that in Pakistan customary MAP were broadly utilized for costing, planning and dynamic viewpoint contrasted with others Also the outcomes uncovered that the utilization of the MAP in monetary organizations was more modern than other assistance organizations. Conventional MAP still has the most elevated level in monetary area of Pakistan in light of its significance and use.

<Table 3.12 is here>

Chand and Dahiya (2010) did an observational review to figure out the use of traditional MAP in Indian industry. 63 organizations answered, comprising the example, for a reaction pace of around 12%. The model was characterized into two parts: ABCM client firms and non-ABCM client

compacts. A five-point Likert scale was used. The point of convergence of the survey was to find evidence of how for the most part standard and contemporary MAP were taken on by Indian industry. The assessments uncovered that improvement of for the most part advantage and cost decline were the prodding factors for using the MA in Indian associations. The expert found a positive connection between the gathering of ABC and company characteristics (e.g., level of customization, strain of challenge, business size, and degree of above to amount to cost).

<Table 3.13 is here>

Notwithstanding, the distinctions were not generally observed to be critical at the 10% level. Anand et al. (2004), in their investigation of cost management in India, concentrated on the reactions outfitted by 53 CFOs in Indian enterprises. The objective of their audit was to get the progression in cost organization rehearses like addressing overheads, uses of financial control, and standard costing in corporate India. The outline survey in like manner expected to check any gigantic differentiation in organization motivation for the performance and use of standard costing as a control gadget between ABCM clients unendingly firms using standard costing systems. The audit spread out that the associations are productive in getting exact cost and advantage information from their ABC cost systems for regard chain and store network assessment. The outcomes demonstrate that organizations utilizing the ABC cost framework have better understanding for benchmarking and planning, yet consistency in their need of spending plan objectives is missing, as opposed to firms utilizing customary costing frameworks. Beforehand, Joshi (2001) did an overview on 60 enormous and medium-sized manufacturing organizations in India and found a reception pace of 20% for action based costing, 13% for movement based administration, and 7% for action based planning. The size of complete resources has been viewed as a huge figure the reception of these contemporary administration bookkeeping methods. Traditional MAP has been underlined more than contemporary ones on account of their apparent higher advantages. The study uncover that the reception rate in India for customary MAP was higher than for the as of late evolved procedures and the reception rate for the recently evolved methods had been fairly sluggish. The greater part of the practice embraced connect with customary planning and performance assessment frameworks. The future accentuation in India is on conventional practice and less on the new procedures, in light of the fact that higher advantages were gotten from such methods. Size has a compelling component in the reception of the recently

evolved rehearses. Aside from certain likenesses in rehearses among Indian and Australian firms, measurably massive contrasts were found in regard to reception rates, benefits determined, and the concentration for future accentuation, both for conventional and modern MAP.

3.4.3 Management accounting Practice in Bangladesh

Among many management accounting techniques, Yeshmin and Hossan (2011) selected the application of responsibility accounting. They surveyed 30 organizations, where they found four responsibility centres: a cost centre, a revenue centre, a profit centre, and an investment centre. This study also revealed that the most common technique for evaluating performance is budgeting. It specifically centres on liability accounting in a couple of associations, which ought to be extended. Sharkar et al. (2006) have checked the degree of the utilization of MAP in the assembling ventures of Bangladesh. This study was finished on 50 recorded manufacturing organizations in Bangladesh, where it found that conventional procedures like fiscal summary examination, income examination, monetary control, and the executive's announcing investigation. Without determining the explanations behind such a decision, which might be driven by various firms' particular factors, the creators fundamentally focus fair and square of utilization of various administration bookkeeping strategies in Bangladesh. Be that as it may, Mazumder (2007) has analyzed the situation with the utilization of MA strategies in the assembling endeavors of Bangladesh. It has been found that advanced strategies like "activity-based costing, target costing, just-in-time (JIT), total quality management (TQM), process reengineering and the theory of constraints (TOC)" are not used in public and private sector manufacturing enterprises, but a few multinational corporations (MNCs) are using some of these techniques, like JIT and TQM. Additionally, customary strategies like "financial statement analysis, cash flow analysis, budgetary control, management reporting, etc." were viewed as broadly utilized, trailed by CVP examination, minimal costing, store stream investigation, and so on. This concentration basically centres on the degree of use of various MA strategies, but doesn't cover the purposes behind such decisions, which might be driven by various firm-explicit elements. Yeshmin and Das (2009) have focused on monetary foundations in Bangladesh. It was uncovered that the directors of the monetary organizations are exceptionally happy with the use of monetary control examination and fluctuation investigation to quantify their presentation among the fourteen MA procedures. Concurrently, administrators were extremely dissatisfied with the use of portion revealing. This

study considers the assistance area for concentrating fairly and squarely on the use of various MA strategies, and thus profoundly creative procedures like movement-based costing, target costing, lean assembly, and so on, remain outside the scope. A study has been done on "the use of the MAP in the manufacturing and service industries of Bangladesh for the purpose of discharging management functions" by Yeshmin and Fowzia (2010). The authors depict 151 associations chosen from assembly and administration ventures, and they distinguish 14 MA methods and three variables to determine the fluctuation of the use level in managerial abilities. The discoveries communicated that MA methods like fiscal summary examination, monetary control, CVP examination, fluctuation investigation, and asset stream examination were normal in the two businesses and were habitually utilized in managerial direction.

Yeshmin and Hossan (2011) conducted another review to zero in on the fair and square use of 23 MA procedures in the event that viable choices were made from the standpoint of the various assembling associations in Bangladesh. This study was expected to analyse the critical impact of the MA procedures on compelling choice by assembling associations in Bangladesh. In their review, they have contended that income explanation examination, proportion investigation, monetary control, CVP analysis, fluctuation examination, TQM, and TOC are generally polished MA procedures. This focus also includes factor examination to determine any unidentified relationships arising from five variables considering the changeability of the responses given by the respondents. Finally, the review sought to examine the degree of meaning of various MA strategies used for dynamic reasoning. Again, a study was conducted by Kabir (2013) to examine the extent of using management accounting tools in making managerial decisions. Focusing on the listed pharmaceutical companies in Bangladesh, the authors found that, on average, 35 management accounting techniques were widely used in the operational, managerial, and strategic functions. To examine the level of applications by Bangladeshi firms and to investigate any intrinsic association amid the purpose of different MA techniques and the tactical and strategic goals of firms, the authors used a combination of traditional and advanced management accounting practice. The review, directed by Farjana Yeshmin (2015), investigated the cost and MA components of the manufacturing industry in Bangladesh. The creator separated the parts using a pivoting part grid to see the application level of cost and the MA components. As a result, an organized poll utilizing 5-point Likert scale estimation was conducted on 66 manufacturing firms.

According to studies, monetary control is the most commonly used instrument by example among the 49 expenses and the MA components. In the vast majority of Bangladesh's assembling business, explicit five components such as liability accounting and bookkeeping, portion detailing, assimilation costing, target costing, and standard costing have been used. Meanwhile, some new cost and accounting components, such as Kaizen costing, six sigma, and worth designing, are not fully informed by the example. Having the restricting element provides less knowledge into the exact nature and subtleties of these components, as well as the hierarchical cycles and activities that precede or are initiated by these systems; this study has suggested the need for manufacturing associations working in Bangladesh to apply cost and MA systems. Shil (2017) have done a survey of manufacturing companies to examine the espousal and completion position of activity-based costing. The authors found that though the quality of ABC is not up to standard, 64% of companies, i.e., a good number of companies, practice ABC for product costing and other purposes. Again, the study reveals that the diffusion rate is not satisfactory. Here, the result did not represent the actual picture of the market due to the small sample size. Fakir et al. (2022) conducted research to examine the current reality practice of the "Responsibility Accounting" framework in recorded material organizations in Bangladesh, as well as to shine a light on the overall satisfaction of the "Responsibility Accounting" framework and the meaning of each component (for example, allocating liability, laying out execution measures, assessing execution, relegating responsibility). In Bangladesh, textile companies are using both traditional (profit or net income) and modern methods (revenue and operating efficiency) simultaneously as benchmarks for performance measurement. Among the quantitative strategies' presentation reports, financial planning and pay articulation possess a higher rate for assessing execution. The frameworks most commonly involved are reward and advancement in material ventures, where 73% include an increment pay standard for compensating responsible individuals or departments. An appreciation letter and profit sharing are more uncommon prize frameworks in the material area. Discoveries uncover that all components are significant for generally fulfilment with the responsibility accounting framework, and the fulfilment with the responsibility accounting arrangement of all recorded material organizations supports a good level.

Rehana and Fahmin (2016) conducted a review to investigate the level of similarity and changes in recorded manufacturing firms in Bangladesh. The review was focused on whether links were

made between the satisfaction levels of various SMAT and various kinds of vital examples, for example, vision and mission, and situating in Bangladesh's recorded assembling associations. Optional information was gathered from 100 recorded organizations between August and October, 2016. Out of 16 sorts of SMAT, none of the procedures found were fulfilled, not many of the methods are in nonpartisan positions, and the greater part of these are at unfulfilled levels. Investigations discovered that the SMAT shifts between nations because of monetary and social contrasts. According to a previous report, there is no difference in the fulfilment level of various types of SMA strategies recognized by the creators. Investigations also discovered a significant difference in essential mission and key positioning at a 95% confidence interval. Among various kinds of SMA procedures, none of the methods examined are considered fulfilled; some are in impartial positions, and most are at dissatisfactory levels. Kinds of SMAT shift corresponding to various sorts of business system, and some don't. It shows up reasonable that orderly distinctions between nations' economies, socio-political environments, legal business environments, and cultural environments contribute to the differential use and satisfaction with various types of SMAT. However, in any case, the discoveries show that there is no distinction in satisfaction levels between various kinds of SMA methods and various sorts of key missions of recorded manufacturing industries, yet there is a distinction in satisfaction levels between various sorts of SMA procedures and various sorts of vital missions of recorded assembling associations. The review also stated that there is a difference in the satisfaction levels of various types of SMA procedures and various types of key situating of recorded assembling associations. Finally, the review concluded that various critical MA procedures carried out effectively have a significant impact on cost control and reduction.

Rahman et al. (2023) conducted their study to examine the extent of the use of cost and MAP in the Bangladesh manufacturing firms and a structured questionnaire was administered among some selected professionals in the accounts and finance departments to survey 23 cement companies. The review proposed a reasonable system and uncovered that there are five aspects for rehearsing CAs and MPAs in the manufacturing business, where concrete organizations are pretty much rehearsing that multitude of aspects. In the costing framework aspect, manufacturing organizations essentially use a partition of infinite cost of value. Organizations are bound to utilize planning for arranging and action-based planning more than other conventional planning instruments. For

execution gauges, the reception of monetary measures is extremely normal. In terms of data for dynamic aspects, cost-volume-profit (CVP) analysis is the most commonly practiced strategy. Esteem chain examination is widely acknowledged by concrete organizations for vital investigation. Present-day refined CA and MAP strategies and instruments, for example, the balance score card (BSC), which investigates contenders' assets and shortcomings, are less commonly utilized. This study provides important insights into the concept of CAs and MAP as they are applied by concrete organizations in developing countries' business sectors. According to findings, cycle costing techniques are widely used by concrete organizations, despite the fact that work costing has not been drilled in this industry. In the costing framework, partition cost (fixed cost and variable cost) and the expense of value are broadly utilized by the chosen organizations. It has also been discovered that the cutting-edge and complex instrument ABC is widely used. It has been observed that concrete organizations prioritize planning for cost control through activity-based budgeting (ABB) and long-term planning. According to the findings, the level of purpose of monetary planning is the most important MA strategy, with all concrete organizations using monetary measures for execution assessment and 78% of the organizations also practicing non-monetary measures. The BSC, the latest joining device for execution assessment, has a low reception rate. For organizations seeking dynamic data, CVP examination is generally utilized. In addition, item benefit examination, client productivity investigation, limited income method(s), assessment of significant capital speculation from non-monetary perspectives, and assessment of the gamble of significant capital venture projects by utilizing likelihood investigation or programmatic experience are recorded and revealed. Procedure examination strategies are used as frequently as possible in manufacturing organizations. Despite the widespread use of item life cycle analysis and industry analysis, value chain examination is the most commonly used procedure. The review investigated how all chosen organizations are utilizing MA apparatuses and strategies, with 51% regularly practicing them and 48% utilizing them most of the time. Furthermore, the review concluded that the standard expense and MA strategies and methods are mostly applied to the concrete business of Bangladesh. Be that as it may, refined techniques and instruments, for example, the balance score card (BSC), make the examination of contenders' solidarity and shortcomings less rehearsing. Be that as it may, the accompanying table recognizes different MA strategies utilized in various explorations and focuses on Bangladesh now and again. However, these studies are mostly perception-based. Despite the narrow scope of the research, the

majority of studies conducted in Bangladesh to date show the coexistence of both traditional and advanced MA techniques.

<Table 3.14 is here>

However, this section has investigated research into the use of MAP in developed and developing countries. The survey uncovered that the principal assemblage of examination in wide area of MAP at first started in created nations during the 1990s. In developing nations, most of surviving exact proof regarding this matter has been gotten in the twenty first centuries. This writing proposes that the take-up of customary MAP and methods was maybe as anyone might expect higher for conventional MA procedures than for contemporary MAP and strategies in both created and emerging nations. In any case, there are signs in late examinations, of a rising utilization of additional contemporary practice. The writing demonstrates there is almost no proof on the take-up of MAP with its most well-known regions like: costing frameworks; planning, performance assessment frameworks, dynamic methodology and SMA have been less ordinarily concentrated on in the agricultural nations. Surviving writing regarding this matter is largely restricted to developing nations.

3.5 Management Accounting within a Contingency Framework

3.5.1 Evidence from Manufacturing Sectors

Management accounting practice (MAP) may vary from organization to organization. In 1961, Burns and Stalker (1961) answered the question of why management accounting practice may differ from one organization to the next. Before 1970, there was no reference to contingency theory (CT). In 1980, Otley (1980) applied possibility hypothesis to the MAP and alluded to the way that no single general accounting practice could be applied to all associations. He expressed that every association would have its own MAP. Possibility hypothesis distinguished a few factors that will impact and assist chiefs with picking proper MAP. These influential factors may include environment, technology, size, strategy, and culture. Contingency theory (CT) is a way to deal with the investigation of authoritative conduct in which clarifications are given concerning how contingent factors, for example, innovation, culture, and the outer climate, impact the plan and capability of associations. Islam and Hu (2012) state the essence of contingency theory is that

prescribed procedures depend on the contingencies of the circumstances. The term “contingency” as utilized in possibility hypotheses is like its utilization in direct practice. A contingency is a connection between two peculiarities. If one peculiarity exists, an end can be drawn to another. Kaharti (2023) use CT to determine outside and interior factors that influence the utilization of the MA framework. While inside, innovation, authoritative angles, and technique are still up in the air, outside factors demonstrate the elements of the outer climate at the degree of business and accounting that shape inward frameworks.

However, Tabitha and Oluyinka (2016) found that, within the last decade, contingency theory has been applied in manufacturing and service industries in several ways by several authors. Hofstede (1983) found that as financial, innovative, and social contemplation altogether affected the working of budgeting frameworks. Shank (1989) likewise applied contingency standards in researching the utilization of MA frameworks and data in an essential manner, and Broker et al. (1991) took a gander at the effect of primary factors and tracked down that organizations that executed in just-in-time (JIT) or other cooperation programs were bound to give data in regards to execution to shop-floor laborers. Safeguards et al. (1991) express that the distinction in accounting practice between the US and Japan has been ascribed to contrasts in hidden objectives, instructive preparation, and professional ways of bookkeepers. While the US involves direct work for apportioning and fabricating overheads, Japan involves it for inspirational purposes. Japanese firms accept that the distribution of direct work costs twists the item cost, yet they use it as a result of the motivating forces it gives to increment work effectiveness and to carry out innovation that will supplant work. A large portion of bookkeepers in the United States are educated in colleges, and their profession is bookkeeping, whereas the majority of bookkeepers and accountants in Japan are educated in courses other than accounting and bookkeeping, and are cantered in various practical areas of the association, including accounting, for 10 to 15 years. From there, some of them are sent for in-house bookkeeping preparation, which will set them up for a few more years in the bookkeeping segment. After a ton of involvement with the bookkeeping/accounting division, they are normally moved from the accounting segment and end up as senior supervisors. Hermes et al. (2006) conducted a survey among 250 Dutch and 300 Chinese companies to compare the use of capital budgeting techniques by Dutch and Chinese firms. As indicated by writing, monetary directors have applied different capital planning practice to figure out which ventures are useful to

the firm. The decision of the assessment strategy is not entirely set in stone by the singular inclinations of the chief or, potentially, by the climate wherein choices must be made. More developed countries will, on average, have more refined financial business sectors, higher levels of human resources, and higher levels of innovation. Subsequently, the creators contended that the degree of financial improvement of a nation and the refinement of the capital planning methods carried out by CFOs in that nation are emphatically related. This study used contingent factors such as size, level of education of the CFO, age of the CFO, and industry type to measure the influence of capital budgeting technique selection by CFOs. In the case of capital budgeting techniques, among the three different capital budgeting methods (i.e., the NPV, IRR, and ARR methods), Chinese firms use the NPV method significantly less often than Dutch firms do, and on the other hand, the IRR and ARR methods are used more often by Chinese firms than Dutch firms. The outcome showed that the decision for the NPV is not entirely set in stone by the size of the firm and the age of the CFO; the two factors have a negative and measurably critical coefficient. This implies that more modest forever firms with more experienced CFOs utilize the NPV strategy less frequently than bigger forever firms with more youthful CFOs do. Then again, as of late, Dutch firms have been substituting the IRR strategy for the NPV technique. Once more, on account of the ARR technique, just the instruction variable is measurably critical, and it has the normal negative sign, implying that higher-trained CFOs will utilize the ARR strategy altogether less, which is predictable with what is generally anticipated. Because of the selection of the expense of capital assessment strategy, the size variable and the age variable are both positive and significantly large for the expense of obligation assessment strategy. Lastly, the instruction variable is decidedly and measurably affected by the expense of value assessment, affirming the possibility that more evolved assessment strategies are emphatically connected with the degree of training of the CFO.

Moreover, Abdel-Kader and Luther (2008) applied contingency theory (CT) to answer observationally to the better comprehension of the connections between 10 factors of contingent and MA methods in the UK's biggest industry area. These variables are related to external characteristics (uncertainty and industry-specific factors), organizational characteristics (degree of centralization, size, and strategy), and manufacturing or processing characteristics (operational complexity, technology, total quality management, just-in-time, and the nature of its production

processes). Alleyne and Weekes-Marshall (2011) applied CT to the assembling organizations in Barbados, where they tracked down that a few elements, for example, practicality, innovation, viability, data necessities, and the reception of best practice, were significant variables impacting the decision of the MA rehearsals. As indicated by Gichaaga (2014), a proper accounting framework relies on authoritative context-oriented factors, and he connected the possibility hypothesis with his thesis as it underscored that each association embraces the MA strategies reasonable to its current circumstance. Ojra (2014) revealed that the utilization of SMA methods is affected by apparent natural vulnerability (market unpredictability), authoritative innovation, the size of the endeavour (bigger undertakings are bound to embrace SMA), and the type of methodology. Ahmad and Zabri (2015) used the possibility hypothesis approach in view of the presumption that exhibition estimation in assembling organizations can be affected by numerous conditions. The creators chose the size of the firm, natural vulnerability, utilization of current innovation, and the proprietor's or alternately supervisor's cooperation as contingent factors with the end goal of this investigation in mind. The output of the bivariate examination of the connections between chosen contingent factors and the utilization of NFPMS indicates that the company's size, which is estimated by yearly deal turnover and number of representatives, is probably going to influence the degree of purpose of NFPMS. These findings demonstrate that the use of non-monetary execution measures will generally increase with organization size, which is consistent with previous studies that disputed the impact of size on the use of contemporary execution measures (Chenhall, 2003; Hoque and James, 2000).Meanwhile, the use of NFPMS is also critical when owners and executives have a higher level of cooperation and contribution in the utilization of this framework. This finding centres on the idea of the proprietor's chief obligations, which require extra data for observing and controlling. This situation may make it difficult to collect additional data using non-monetary execution measures. Similarly, the more noteworthy utilization of present-day innovation has been emphatically and altogether connected with the utilization of NPMS, which demonstrates that better data for execution estimation is essential because of the expanded intricacy of firm activities. The creators tracked down that the inclusion of proprietors and chiefs, the size of firms, and the utilization of present-day innovation have been recognized as huge elements that have a critical relationship with the reception of NFPMS among Malaysian assembly firms.

However, Tabitha and Oluyinka (2016) found that organizations select their costing methods that are generally appropriate for their current circumstance, affected by the degree of innovative progression, size of the organization, phase of the item, culture, and so on. Nair (2017) involved the possibility idea in their review to look at whether factors, for example, association size, power of market contest, level of capability of bookkeeping staff, and high level creation innovation essentially affect the MAP in Malaysia. Oyewo (2017) applied possibility hypothesis to assess the viability of the MA capability and saw that the viability of the MA capability was essentially impacted by the six relevant factors of firm size, age, area, presence of the MA division, connection with an unfamiliar substance, and public citation status. Shahzadi et al. (2018) conducted their study on different types of Pakistani companies, where they applied contingency theory to check whether the design of MAP was affected by environmental uncertainty, the nature of the organization, strategy, organizational structure, advanced manufacturing technology, total quality management, and just-in-time. Adu-Gyamfi and Chipwere (2020) utilized possibility hypothesis to test the interrelationship between the MAP and the performance of manufacturing firms in Ghana, where they utilized contingent determinants or specialists that impact the decision of the MA like market rivalry, bookkeeping staff, proprietor/the board's cooperation, and changes in innovation. In their review, Ogungbade and Oyerogba (2020) noticed that the MAP among assembling firms in Nigeria were dependent upon the way of life of each firm.

3.5.2 Hypothesis Development

Based on the above analysis, the following factors have been identified to study their influence on the extent of the use of MAP by manufacturing companies in Bangladesh.

a) Size of the organization – (ln of Total Asset) as a proxy to size;
b) Years in operation.
c) Ownership participation to influence the extent of the use of MAP
d) Qualified stuffs have influence the extent of the use of MAP
e) Importance of information technology (IT) in processing information to influence the extent of the use of MAP

Size of a Firm

Earlier research such as Abdel-Kader and Luther (2008) has consistently revealed that the size of a firm has an impact on the use of MAP in business organizations. Researchers have used a few scales for estimating organization size, for instance, number of staff, complete resources or deal turnover (Bruns & Waterhouse, 1975). The MA specialists are attracted by the authoritative examination request to look at the impact of organization size on the execution of MA frameworks. A bigger firm has more noteworthy and complete assets and better interior correspondence frameworks that work with the dissemination of MAP. Furthermore, bigger firms are new complicated and deal with additional troublesome issues. As a result, they necessitate more control and data on their business exercises and, hence, need more thorough and complex MAP. Besides, all things considered, a huge organization has a bigger number of items and clients, and its assets and limits are bigger, empowering it to put resources into timely arrangement, control, and execution assessment rehearsals. Throughout the past many years, various experimental investigations have inspected the impact of organization size, and by far most have revealed the presence of a hugely positive relationship between this component and the execution of cost and MAP. Drury and Tayles (2000) expressed that modern costing frameworks are often planned or carried out in light of specific factors and conditions, e.g., the organization's size. Early examinations by Bruns and Waterhouse (1975) expressed that when organization size expands, a requirement for executing better planning methods arises for arranging and controlling various exercises. Besides, Shipper (1981) reviewed the connection between planning frameworks and company size. His findings hold up the research hypothesis that the planning and control frameworks used by large organizations are typically more strictly regulated than those used by small organizations. Puxty and Lyall (1989) revealed the presence of contrasts among little and enormous organizations concerning the execution of standard costing and planning frameworks in 453 modern organizations in the UK. Another review, by Kader and Luther (2007), concentrated on the variables impacting the association's determination of MAP. It was likewise revealed that the size of the organization was a critical contingent variable. In US fabricating organizations, Waldron and Everett (2004) overviewed the relationship between the utilization level of conventional and high-level MAP and company size. The discoveries uncovered a critical positive relationship between the last option and the use of MAP, particularly with respect to cutting-edge procedures. Alebaishi (1998) led a conference in Saudi Arabia to review the elements impacting

the execution of certain MAP. He reached the conclusion that corporate size was emphatically connected with the degree to which MA practice was carried out.

Despite the fact that the vast majority of MA focuses on demonstrating the enormous positive impact of organization size, a couple of scientists did not state such an outcome. As per Isa and Thye's (2006) research in Malaysian gathering associations, the variable of association size as assessed by bargain turnover was not entirely associated with the execution of bleeding edge. They remarked on this outcome by expressing that while these elements might assume critical parts in affecting the choice to utilize progressed MA methodologies, their belongings may not be pretty much as quick as expected (Isa & Thye, 2006). Libby and Waterhouse's (1996) concentrate on focused on exploring the factors associated with amend in MAP in Canada. They induced that association size was not a sign of changes; then again, the limit of a relationship for amend was the main pointer for MA practice change. Moreover, a replication of the Libby and Waterhouse (1996) study was coordinated by Williams and Mariner (2001) in Singapore, who finished up comparably that there was a setback of any confirmation supporting the positive connection between association size and changes in MAP. Based on above literature, hypothesis 1a has been developed.

<Table 3.15 is here>

H1a: Size of the organization has positive and significant impact on MAP.
Alternative Hypothesis: Size of the organization has no positive and significant impact on MAP.

Age of the Firms Operation

The extent of the use of MAP demands different firm-specific parameters, which are usually related to the number of years the firm has been in operation. Age has been viewed as related to the probability of endurance; for example, at the point when it has been in activity for quite a while, it obtains satisfactory involvement in terms of its own exercises (e.g., functional and regulatory), including the execution of MAP. This point centres on the idea that more seasoned organizations are more ready to embrace and utilize more and fresher MAP than more youthful organizations (Firth, 1996). Then again, another assessment (e.g., Khandwalla, 1977) recognizes two age

classifications, specifically, associations with normal age (40–60 years of age) and associations with a more established age (over 60 years of age). As needed, he emphasized that the last option is generally more moderate, organized, and less ready to acknowledge any gamble in their presentation than the previous, to the degree that it could make them loath to apply any update or advancement in their MA frameworks. Basing themselves on these two contentions, a moderately modest number of studies examined the effect of organizational age on the execution of MAP. Alnamri (1993) recognized the administrative, authoritative, and natural elements as having the best effect on the refinement level of MAP performance in Saudi organizations. The investigation discovered that there was no hint of any critical relationship between the organization's age and this refinement level. Firth (1996) inspected the reception condition of MAP created by Chinese organizations concerning the effect of unfamiliar joint endeavors. He closed likewise, saying that there was no proof of any connection between the organization's age and the pace of its reception by industrialist MAP. Besides, O'Connor et al. (2004) inferred that the age of an association is one of the elements affecting the gathering of MAP created by Chinese state-owned ventures. They decipher this finding by observing that as these endeavours become more established, Chinese administrative guidelines become more settled and aware of them, which eventually transforms into barriers to change. At last, in Jordan, Hutaibat (2005) reasoned that there was no connection between the organization's age and the degree of execution of cutting-edge MAP. In order to developed hypothesis H1b, the literature suggest the following:

> *H1b: Years in operation (age of the company) has positive and significant impact on MAP.*
> *Alternative Hypothesis: Years in operation (age of the company) has no positive impact on MAP.*

Ownership Participation to Influence the Extent of the Use of MAP

By definition, an owner/manager will be involved in firm administration and will have the support of the proprietor/supervisor; however, the level of cooperation may vary, and this may be a variable that influences the degree of purpose of MAP. Since the owner and manager are very familiar with the administration of the firm, their association with the proprietor and directors of the firm could straightforwardly impact the degree of purpose of MAP. As a famous contingent component, steady directors are exceptionally essential for any fruitful association. As the person who decides

the type of data required by the associations to do their obligations in arranging, coordinating, checking, and controlling, supervisors are the association's central participant for impacting an improvement in the decent act of the executive framework. Owner-managers in the reception of development, according to Premkumar and Potter (1995), would reduce the degree of risk attempted as they worked with admittance to assets and resolved any authoritative boundaries. Hierarchical imaginativeness writing has revealed a positive connection between the top administration's demeanour toward change and the association's readiness to explore different avenues regarding new instruments or gadgets (Damanpour, 1991). Bourne et al. (2002) observed that proprietor-supervisor cooperation was compelling in the fruitful execution and on-going utilization of the new performance measurement system (PMS). This focus also contended that the consistent association of top administration was critical in resolving issues when emergencies and clashes arose. The outcome is upheld by other prior investigations, like Chan's (2004) and Kennerley and Neely's (2002). These investigations asserted that top administration responsibility and authority are key elements for PMS plan execution and viability. A later report directed by Tung et al. (2011) likewise uncovered that proprietor/supervisor support was viewed as related to the adequacy of PMSs in regard to execution-related results. In Saudi Arabia, Alnamri (1993) uncovered the significance of TMS in making sense of contrasts in MAP execution between "Saudi-owned and managed companies and joint venture companies" situated in Saudi Arabia. He stated that when the owner or chief collaborator upgrades and supports the use of accounting data, for example, planning framework data, it encourages employees and managers in the organization to use this type of data. One more study by Hutaibat (2005), directed in the Jordanian assembly area, and announced that the TMS factor fundamentally impacted the execution degree of MAP. According to a previous report by Liu and Dish (2007), based on a contextual investigation in one of China's largest assembling organizations, proprietor-chief cooperation was possibly the most fundamentally compelling component on ABC achievement. A hypothesis on ownership participation has been developed in H1c.

H1c: Ownership participation has positive and significant impact on MAP.

Alternative Hypothesis: Ownership participation has no positive and significant impact on MAP.

Qualified Staff

Stuff qualifications measure by the educational background of the respective stuffy. In manufacturing firms, the presence of qualified staff can be a basic component in the gathering of MAP. Most colossal firms have accounting and cash divisions and, appropriately, as to enrol qualified in-house staff to do capable itemizing and meeting. Contrasts in MAP usage might be made sense of by contrasts in firm openness of staff to work. Thus, this variable is huge and will be integrated for the reasons for testing the important hypothesis. In any case, there are stresses with respect to whether qualified accounting staff ought to be treated as an exogenous or endogenous variable. This division depends on whether the presence of qualified unendingly staff causes the get-together of MAP, of course, expects that their social event prompts qualified staff to be utilized. The past dispute recommends that ensured staffs should be indulgenced as an exogenous variable, and the last choice shows the endogenous individual of the variable. Past composing gives some assistance for the exogenous suggestion of this variable. For example, Al-Omiri (2003) propose that the attendance of prepared staff is connected with a raised level of take-up of MAP, while in a SME setting, Amoako (2013) recommend that confirmed accountant assist with further developing MAP in SMEs. Haldma and Laats (2002) have reliable that an absence of qualified staffs is going about as prevention to the greater utilization of current MA methods. The hypothesis on qualified accounting stuff and MAP is presented in H1d.

> *H1d: Qualification of accounting staff has positive and significant impact on MAP.*
> *Alternative Hypothesis: Qualification of accounting staff has no positive and significant impact on MAP.*

Importance of Information Technology in Processing Information

The rapid changes in information technology made information available throughout the organization. Kader and Luther (2004) expressed that, as the essential suppliers of data, the test for the executives' bookkeeping was to guarantee that proper data was accessible to help the board at all levels. As indicated by Kader and Luther (2004), among four consecutive stages that portray the development of the MA direction, the last stage was the making of significant worth through viable asset use, which was to be accomplished by the utilization of advances to look at the drivers of client esteem, partner esteem, and authoritative advancement. The four unique stages are not substitutions for one another; each new stage understands the ideas of the early stage(s) by adding

new issues as time permits. The significant contrasts among stages two (data for the board's arrangement and control), stage three (decrease of asset waste), and stage four (esteem creation through viable asset use) are changes in fixation from using data innovation (stage 2) to asset management and waste decrease, and lastly to value creation (stage 4). The administration MA should be capable of providing basic data to leaders on demand. This information technology (IT) is for the most part instinctive in nature and very situational, which was not known beforehand. This data is expensive because of its dynamic convenience, which will give the hunters an upper hand. As a result, the IT used in data handling should be deeply integrated, ongoing, and allow for question-based solutions. A complex framework in this manner requests data innovation that is sufficiently smart to quickly answer the chief's requirements. In an oversimplified framework climate, reliance on IT isn't just basic. Indeed, even the most essential framework can't provide needed data continuously; it should rather concede it to some future time span. This is because of low interest in IT, talented labor, and other frameworks. Sunarni (2013), Abdel-Maksoud (2004), and Tuan et al. (2010) investigated data innovation as a significant contingent to impact changes in MAP. Once more, Kabir (2019) planned to make sense of the progressions that have occurred and the elements that are behind the progressions in MA rehearsals in recorded assembling organizations in Bangladesh. The creator found that during the period 2011 to 2015, similarly current MA devices like the fair scorecard and CIMA methodology scorecard were supposedly used by certain organizations as they began zeroing in on essential decision making because of the progressions occurring in the business climate and the reception of IT in each area of Bangladesh with the digital Bangladesh trademark of the recently chosen government in 2014. The review of those literature suggest the following hypothesis:

H1e: Information technology has positive and significant impact on MAP.
Alternative Hypothesis: Information technology has no positive and significant impact on MAP.

Notwithstanding, this segment has sensible the choice of five contingent factors for this study (size of the firm, age of the firm, participation of owner/manager and competent accounting staff, IT communication). The literature reviews of each of the factor’s state that these factors affect the extent of use of MAP in an organization. The literature review consequently supports the proposed first null hypothesis linked with the second research question as follows:

H1: There are significant and positive relationships between selected contingent factors and the use of MAP.

H1a: Size of the organization has positive and significant impact on MAP.

H1b: Years in operation has positive and significant impact on MAP.

H1c: Owner/manager's participation has positive and significant impact on MAP.

H1d: Qualification of accounting staff has positive and significant impact on MAP.

H1e: Information and communication technology has positive and significant impact on MAP.

3.6 Management Accounting Practice and Organizational Performance

In modern business era, performance measurement and management plays a crucial role at present competitive business environment due to scarcity of resources. Among the management functions, i.e. planning, organizing, directing, co-ordination and control, the performance measurement is directly related to planning and controlling task. Effective organizational decisions is mainly depends on the company's performance measurement system, which is required to see and evaluate whether and how the organization performed the intended direction-i.e. fulfilling the control and producing timely data. In their study, Richard et al. (2009) classified organizational performance into the following three specific areas of firm's outcomes: "(1) Financial performance (profits, return on assets, return on investment) etc (2) Market Performance (sales, market share) and (3) Shareholder return (total shareholder return, economic value added) etc." According to Kaplan and Norton (1996) financial performance methods are generally used in measuring the feat of enterprise because they give accurate and objective results, though modern researcher criticized financial performance due to their inadequacy at various point. As of now, aggressive business climate and the improvement in assembling techniques give need to a few non-monetary issues, for example, quality, flexibility, opportune conveyance, consumer loyalty, representative the contribution, and so on. Be that as it may, the monetary performance of the organization is utilized to evaluate its advancement pattern and development possibilities. Even though there are various markers for assessing firm performance, the choice of suitable instruments is subject to the state of the concentrated-on objects and the reason for the review. Analysis of the cause of economic performance is critical for investors, including stakeholders. The value of a shareholder, which is

defined by a company's market value, is affected by multiple factors, including the company's current profitability, risks, and economic growth, which is necessary for future corporate earnings. Financial performance metrics such as ROA, ROE, ROI, and NPM are used in this study.

<Table 3.16 is here>

3.6.1 Determinants of Financial Performance in Manufacturing Firm

The majority of the research can be divided into two categories: those that rely on publicly available information and those that use proportions of the chief's impression of performance. Most studies utilize optional information, like stock value execution and information from public corporation budget summaries Maiga & Jacob (2006); in any case, a critical number utilize perceptual measures, like Jusoh et al. (2008). Kim et al. (2021) concentrated on the effect of miniature and large scale factors on firm performance by choosing 30 recorded food handling organizations in Vietnam from 2014 to 2019. Close to the relapse orderly method, the Blinder-Oaxaca decay examination was likewise used to profoundly quantify the impact of factors on monetary execution more. Financial performance was measured by ROE (net income/average shareholder's equity) and return on sales (operating profit/net sales) for the dependent variable (Y). Adu-Gyamfi et al. (2020) inspected the effect of the MAP on the FP of an assembling firm in Ghana. The review was quantitative in its examination approach, and 200 assembling firms were chosen, where relapse investigation was attempted to check the relationship between the MAP and performance (FP). The creator utilized six instruments to quantify the dependent variable: level of efficiency, item quality, and number of conveyances on time, deals development rate, benefit development rate, and income development rate. Also, the creator commented that MA emphatically impacts the presentation of assembling firms in Ghana.

Zaid and Ahmad (2020), on the other hand, looked at how firm specifics affected the financial performance of Indian firms. The study covered 1069 companies listed on the Bombay Stock Exchange between 2011 and 2017. The authors used the specifics of the company as an independent variable and the performance of the company as a dependent variable in this study. The cost of financial distress, growth prospects, firm size (the natural logarithm of total assets), total taxes, asset structure, and leverage were used to gauge a company's specifics. Return on asset

(net income divided by total assets), return on capital employed (earnings before taxes and interest divided by capital employed) and return on net worth (net income divided by shareholder's equity) were also used to assess financial performance. Endri et al. (2020) have completed their study to estimate the impact of financial performance on the profitability of sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2014–2018 periods. The independent variable, i.e., financial performance, is measured by the current ratio (current asset/current liability), fixed asset turnover (sales/fixed asset), total asset turnover (sales/total asset), and debt-to-equity ratio (total debt/total equity), while the dependent variable, profitability, is measured by the return on assets (earnings after tax/total asset). With a particular focus on manufacturing companies in Nairobi, Kenya's Industrial Area, Waihenya (2018) investigated the impact of managerial accounting practice on the financial performance of manufacturing firms. The study was quantitative in nature, and 183 manufacturing companies were chosen using stratified sampling. Profits, net income, sales, total assets, current assets, and current liabilities were all used by the author. The findings indicated that activity-based costing, budgeting procedures, and cost-volume-profit analysis all had an impact on Kenya's financial performance. Oluwagbemiga et al. (2014) utilized information from 40 assembling organizations recorded on the “Nigerian Stock Market” from 2003 to 2012 to examine the connection between cost administration practice and firm execution in assembling associations. Here, the creator utilized direct material expense, direct work cost, creation above cost, and managerial above cost as free expense board factors, while benefit, i.e., working benefit, was taken as an independent variable to quantify the company's presentation. Bahadur and Deb (2013) have done their review to look at and break down the monetary execution of “Square Pharmaceuticals Limited (SPL)” based on conventional estimation devices like ROCE, ROE, EPS, and so forth and the new exhibition measure EVA, as the idea of EVA accentuates the nature of profit and not only its amount, as it considers the general expense of capital utilized in the business, including the expense of value. The review includes an assessment of the monetary performance of the organization dissected by utilizing some conventional estimation instruments, for example, “return on capital employed (ROCE), earnings per share (EPS), and return on equity (ROE)” in light of the secondary data gathered from the distributed yearly reports of SPL for the periods 2005-06 to 2009-10. The investigation discovered that the organization has been effectively prepared to create value, i.e., increase wealth for its investors. The organization's profit is a lot higher than the general expense of capital. From the investigation, the conventional exposition

markers are showing very high upsides for ROCE, ROE, and EPS development when contrasted with EVACE. It is seen that the conventional boundary shows a seriously blushing and solid image of the organization during every one of the five years of the review. At long last, the review discoveries show that the connection among ROCE and EVA is profoundly certain, and customary execution markers show that it has a high value when contrasted with EVA.

3.6.2 Empirical Evidence on MAP and FP

While surveying the exhibition of an undertaking, arising monetary outcomes are quick to draw consideration. The main mark of the progress of an undertaking, aside from of its size, is its FP. The FP estimates in light of bookkeeping information are connected with final functional performance as opposed to relative business performance. Along these lines, those exhibition measures are utilized in assessing the last presentation of the endeavour all in all. Those actions simultaneously give an open door to the evaluation of the performance whose obligation is restricted to just a solitary parcel or spot of production (elik, 2002). Mia and Clarke (1999) expressed that the presentation of an association or division might be seen as the degree to which the association or division has been effective in accomplishing its arranged targets. Instances of FP measures efficiency, cost, quality, conveyance plan, portion of the overall industry, and deals development rate; working benefit, income from tasks, profit from speculation, new item advancement, Research and development movement, and staff improvement. The FP estimation techniques are generally utilized in estimating the presentation of undertakings since they give exact and objective outcomes. Besides, most of earlier research didn't concentrate completely on nonfinancial markers yet cantered around FP or in general execution, a training broadly scrutinized because of its inward and verifiable concentration, which is bound to be controlled by managers (Hoque & Moll, 2001). Those FP estimations are thought of as not to give a reasonable image of an association's exposition except if they are combined with non-monetary pointers (Chenhall & Langfield-Smith, 2007). The examinations in this space have either inspected a conjectured direct connection between the utilization of MAP and hierarchical execution or tried this relationship with MAP as only one of various illustrative factors. These examinations have tracked down blended brings about in terms of the effect of MAP on hierarchical execution. The accompanying audit focuses on those that delivered both positive and adverse outcomes.

Positive Evidence for an Association between the Use of Costing and Performance

Using data from the Nigerian stock exchange, Oluwagbemiga et al. (2014) investigated whether there is a significant correlation between manufacturing cost and firm performance of manufacturing organizations. For the years 2003 to 2012, 40 companies listed on the Nigerian stock exchange were chosen. Direct material expense, direct work cost, creation above cost, and managerial above cost were all considered free factors in the review based on optional data extrapolated from the chosen firm's examined budget summaries, while benefit was taken as a dependent variable addressing firm performance. The outcomes show a huge positive connection between direct material expense, direct work cost, and firm execution. In any case, both creation above costs and managerial above costs were seen as negatively related to firm execution. Rehman (2010), while examining MA methods in Pakistani manufacturing firms, showed that the use of ABC is apparently utilized by around half of the organizations. Of those that detailed high utilization of variable costing, the material and concrete areas contained 68%. It was found that beneficial firms utilizing two MA strategies, target costing and movement-based administration, essentially affected benefits at 6.4% and 8.2%, respectively. Salawu et al. (2012) did an overview of action-based costing practice among manufacturing organizations in Nigeria. As per the review, the failure of conventional expense frameworks to recognize significant expenses was the main reason for their choice to take ABC. The researchers discovered a positive relationship between ABC reception and company characteristics (e.g., level of customization, level of competition, business size, and extent of above to cost). Be that as it may, the distinctions were not generally observed to be significant at the 10% level. Gathara et al. (2019) found that the organization embraced action based costing as a MAP, as concurred by 52.4% of the respondents, in spite of the fact that it was not decisive from the review that action based costing impacted the monetary execution of 53 assembling firms in modern region Nairobi, as half of the respondents consented generally, 47.6% consented to a moderate degree, and 2.4% consented to a low degree. In his study, “the impact of MAP on the performance of manufacturing firms: empirical evidence from Ghana,” it has been found that costing frameworks decidedly affect business execution, and that implies that a rate expansion in the degree to which the respondents apply costing strategies will prompt 0.566 expansions in managerial performance as well as the other way around, holding another variable consistent. The outcome is upheld by Gichaaga (2014).

Positive Evidence for an Association between the Use of Budgeting and Performance

Budgeting can uphold monetary performance the executives by coordinating known monetary results with successive re-estimating of the financial plan and connecting it to investigation of performance patterns (Melek, 2007). Shipper (1981) was an early review that looked to lay out a connection between the utilization of planning and execution by testing for a relationship between hierarchical execution and the company's way to deal with planning. Two distinct approaches were defined and termed the “formal administrative approach” and the “interpersonal approach.” The perusal demonstrated that the formal managerial way to deal with planning was all the more emphatically connected with great execution in bigger firms than in more modest firms, which inclined toward a more relational way to deal with planning. Extraneously, Hansen and Van Der Stede (2004), who examined the explanations behind planning in associations and their connection with execution, tracked down that those three explanations behind planning (functional preparation, performance, and strategy development) were emphatically connected with hierarchical unit implementation. Besides, Melek (2007) did a concentrated study on the effect of spending plan cooperation on administrative execution through hierarchical responsibility at the main 500 firms in Turkey. The consequences of this study gave various commitments to the executives' bookkeeping by working on their comprehension of spending plan interest and authoritative responsibility as they influence administrative performance. To start with, the consequences of the relapse investigation demonstrated that the impacts of financial plan support and hierarchical responsibility on administrative execution and performance are both positive and huge. Second, the review found that managerial performance and performance scores expanded when the communication score between financial plan interest and authoritative responsibility expanded. Qi (2010) focused on the effect of the planning system on execution in SMEs in China, and the review found a constructive outcome of the formal planning process on firm FP. To begin, the study discovered that more formalized planning and arranging results in higher deal income. Also, spending plan objective qualities firmly influence the monetary presentation of Chinese SMEs; in this way, clear financial plan objectives lead to more significant standard accomplishments, while troublesome (yet feasible) spending plan objectives increase the inspiration of workers to accomplish financial plan principles. Third, the review found that more

formalized monetary control prompts higher benefit development for a firm. Through his study, Waihenya (2019) set off on a mission to lay out that support in spending plans impacts the monetary performance of assembling organizations in Nairobi's modern region. The review shows that the respondents expressed 9.5% to a moderate degree, 43.9% generally, and 47.6% to an exceptionally enormous degree. This proposes that financial plan interest decidedly affects generally speaking performance. In their study, “The Impact of Management Accounting Practice on the Performance of Manufacturing Firms: Empirical Evidence from Ghana,” Adu-Gyamfi et al. (2020) found that planning frameworks emphatically affect business execution. That means that a 1% vertical increase in the degree of monetary control influences hierarchical execution by 1.373, while a 1% decrease in the degree of monetary control influences authoritative execution, all else being equal. The result is supported by Gichgaa (2013), where the study showed that a one-unit increase in budgeting practice will lead to an increase in financial performance of 0.601 in manufacturing companies in Kenya. Mohammed and Ali (2013), in a study on "the relationship between budgeting and performance of remittance companies in Somalia," reasoned that the relationship amongst budgeting and firm performance is 0.514, and that implies that one degree of expanded budgeting proficiency will prompt 0.514 higher firm economic performances. This coefficient shows a sensibly certain however genuinely critical connection among budgeting and firm performances.

Positive Evidence on Performance Measurement and Performance

Performance analysis (PA) has traditionally been internal, aggregate metrics of financial performance (FP) (Chenhall & Langfield-Smith, 2007). Be that as it may, the significance of this action has been tested in the ongoing industry climate. Firms have been forced to implement management methodologies and frameworks in order to overcome disappointment with traditional transient monetary estimation frameworks (Said et al., 2003). Subsequently, as of late, associations have looked to foster a more thorough PMS to give supervisors and representative’s data to help with dealing with their company's activities (Lobby, 2008). The BSC way to deal with executives (Kaplan 1994) has acquired an unmistakable quality in MA research as an approach to coordinating monetary and nonfinancial execution measures (Hoque & James, 2000). The

execution of BSC and its effect on performance was explored by Maiga and Jacobs (2003), who tried to find corresponding impacts among BSC and ABC, tracked down that ABC, when joined with BSC, decidedly affected hierarchical execution. According to Jusoh et al. (2008), who investigated the extent of various presentation measure utilization and its effects on Malaysian manufacturing firm's performance, the utilization of non-monetary measures, explicitly internal business processes, and the BSC's advancement and learning viewpoints worked on firm FP. There has been an expanded authoritative utilization of non-monetary measures for performance analysis (PA) lately (Hoque, 2004). Concentrates on revealing a positive relationship between this action and its presentation incorporate that Bryant et al. (2004). Anderson et al. (by and large, consumer fidelity was emphatically connected with contemporaneous bookkeeping profit from venture, Ittner and Larcker (1998b) gave proof that consumer loyalty measures are proactive factors relating non-monetary execution to accounting execution. In a resulting study, Broker et al. (2000) uncovered a positive connection between consumer loyalty measures and future accounting performance. Utilizing a more extensive scope of non-monetary measures, Said et al. (2003) inspected the current and future execution results of integrating non-monetary measures concerning a bunch of execution measurements among U.S. organizations. In view of execution estimated as bookkeeping based measures (ROA) and market-based measures, they detailed that the utilization of non-monetary measures in assessing execution had emphatically impacted market execution. In a later report, Bryant et al. (2004) suggested that when firms execute a PMS that contains both finance related and non-financial measures, they will assist more than firms that with relying totally upon money related measures. They found a positive connection between monetary impacts and both consumer loyalty and new item presentations, however just for firms that utilization both monetary and non-monetary performance measures. In their study, "The Impact of Management Accounting Practice on the Performance of Manufacturing Firms: Empirical Evidence from Ghana," Adu-Gyamfi et al. (2020) tracked down that an improvement in the degree of applying monetary performance valuation strategies will produce extra 0.433 percent expansions in firm performance. Then again, should the degree of utilization of the monetary performance assessment method be limited or not applied, authoritative performance will as needs be diminish, yet all the same simply by 0.433. Further, in a study titled "Effects of Management Accounting Practice on Financial Performance of Manufacturing Companies in Kenya," Gichagaa (2013) concluded that the correlation between performance evaluation practice and firm

performance is 0.599, which means that one level increase in performance evaluation practice will lead to 0.599 higher firm performances.

Positive Evidence on Strategic Management and Performance

Cadez and Guilding (2008) speculated the immediate connection between SMA use and an organization's exhibition, and they gave the normal connection for this relationship. They contended that the significant thought of a bookkeeping data framework is to give data to help the administrators in the execution of plans and fulfilment of their positions, support the directors in the dynamic cycle, and upgrade authoritative execution. Once more, Tariq et al. (2019) showed that SMA may be furnished to Jordanian assistance firms with unmistakable key data that supported the advancement of their market methodology and worked on their organization's presentation. The key SMA components that influence the organization execution of administration organizations and accordingly merit more consideration are client benefit examination, investigation of lifetime client productivity, valuation of clients, investigation of client value, and examination of client maintenance. In their study, "The Impact of Management Accounting Practice on the Performance of Manufacturing Firms: Empirical Evidence from Ghana," Adu-Gyamfi et al. (2020) found that beta values showed that strategic analysis had a predictor of (= 0. 390; p = 0. 073; this reveals that strategic analysis has a positive impact on performance. Further, in a study titled “Effects of Management Accounting Practice on Financial Performance of Manufacturing Companies in Kenya,” Gichagaa (2013) concluded that the correlation between strategic analysis and firm performance is 0.654, which means that a unit increase in strategic analysis will further lead to an increase in financial performance by a factor of 0.654.

Positive Evidence on the Combined Effect of MAP and Other Factors on Performance

Various examinations have researched the utilization of MAP related to different factors as determinants of financial performance. Abernethy and Lilis (1995) found that a more noteworthy dependence on productivity based FP measures meaningfully affected apparent performance in adaptable firms than in non-adaptable firms. Likewise, Hoque (2004) uncovered the presence of a

huge and positive relationship between the board's essential decisions and FP, which was connected with the executives' high utilization of non-monetary measures for FP assessment. Hall (2008) incorporated the impact of PMS on administrative execution through the interceding factors of job lucidity and mental strengthening. The outcomes showed that complete PMS affected supervisors' acknowledgment and inspiration, which, thus, impacted administrative execution. One more concentrate by Hyvonen (2007) explored the connections between authoritative performance and client centered procedures, execution measures, and data innovation. The outcomes demonstrated that when a firm doesn't follow a client centered system, contemporary MAS in blend with cutting edge data innovation is connected with high client performance. At last, the outcomes show that a fit between the client centered technique and FP measures further develops client execution. Past execution estimation, various examinations have investigated other intervening factors in grasping the connection among MAP and FP. Choe (2004), for instance, utilized authoritative figuring out how to research the impacts of the MA data expected by AMT on further developing FP. The experimental outcomes showed that facilitators of hierarchical learning moderating affect the connection between the arrangement of data and FP improvement. Subsequently, it was reasoned that while learning facilitators are all around organized and profoundly used, the arrangement of data is bound to be connected to successful learning and, thusly, further developed FP. Tayles et al. (2007) inspected whether the degree of scholarly capital (IC) impacts MAP and execution. Their exploration proposes that the degree of buy in IC is related with the utilization of MAP, business performance, and the capacity to answer future occasions. In a resulting study, O'Regan et al. (2008) endeavoured to evaluate the connection between essential preparation, parts of the outer climate, and generally corporate performance in U.K. producing SMEs. The outcomes show that essential preparation in manufacturing SMEs is decidedly connected to in general corporate performance.

3.6.3 Evidence from Manufacturing Sectors

Ogundajo and Nyikyaa (2021) studied the effect of management accounting practice on the performance of manufacturing companies in Nigeria. 20 manufacturing were surveyed while regression analysis was utilized in testing the hypothesis. Here, the authors used market share to measure organization’s performance. And the study found that a significant relationship between management accounting practice and market share of manufacturing companies in Nigeria.

Gyamfi et al. (2020) affirms that MA practice like costing framework, planning, PA, data for direction and key examination are specialists that influence manufacturing company's presentation in Ghana. The review was with the impediment of just focusing on the administration bookkeeping practice of assembling/ manufacturing firms in Ghana and not every one of the organizations in the economy, The concentrate likewise gets into light another course the exploration on MA rehearses by welcoming ready for conversation on the significance of the MA rehearses in the improvement of assembling firms in Africa. A quantitative research pattern was using in demeanor this study. Applying Stratified random sampling method, cross sectional survey method was used to collect data from 200 manufacturing companies in Ghana. For research purpose, the review takes on the institutional hypothesis, the possibility hypothesis and embraced hypothesis where the institutional hypothesis guarantees that there is a connection between the degree of the MA practice and FP, the possibility hypothesis affirms that hierarchical presentation relies upon the fit between authoritative setting and design lastly with the adjusted hypothesis it look to make sense of how these assembling firms can adjust to changes that generally occurs.

<Table 3.17 is here>

Sylvester et al. (2019) investigate the effects of MA practice on the financial performance of manufacturing companies in Nigeria. Through an enlightening overview plan, the information gathered was both quantitative and qualitative. A defined irregular examining strategy was applied to concoct the example size since the populace in various assembling firms was viewed as heterogeneous, suggesting that a basic irregular example is unrepresentative. The review gathered essential information from 46 assembling organizations in Lagos. The review reasons that data for dynamic practice is the most profoundly involved MA practice among the assembling organizations in Nigeria, trailed by essential examination, planning, execution assessment, costing, size, and influence separately. Utilizing the possibility hypothesis and the new institutional human science hypothesis of the MA, the review recognizes that ROE has expanded because of the utilization of the MA, while data for dynamic practice is the most exceptionally involved MA practice among the assembling organizations in Kenya, followed by “strategic analysis, budgeting, performance evaluation, costing, size, and leverage,” respectively. The focus also assumes that the MA capability develops procedures that enable assembling organizations to capitalize on financial developments in gaining a sustainable advantage, and the MA provides data from its current

situation to executives to work with direction and ROA as a result of the MA's practice. Helen (2018) found that decision-making practice were the most profoundly utilized MA practice among assembling firms in Uganda, followed by "strategic analysis, budgeting, and performance evaluation," respectively, and that ROE had expanded because of the use of the MA. According to the review, the MA capability develops systems that enable manufacturing organizations to capitalize on monetary developments to gain a competitive advantage. The MA provides data from its current situation to the board in order to work with navigation and ROA. These results are thus limited to one manufacturing organization and may be of little use to organizations in other parts of the country. Again, because the information was self-reported and polls were used, the responses on the overview did not accurately convey respondents' genuine associations with the MAP. A portion of the respondents didn't return the surveys, in this way bringing about a more modestly designated test and consequently impacting the idea of factual detailing. Furthermore, the lower accuracy of the data has an impact on proper statistical analysis. Fekadu (2018) surveys the utilization of the MAP and analyzes their impact on the presentation of Ethiopian concrete organizations. The review result demonstrates that costing practice is the most profoundly utilized MA practice, trailed by planning practice, in Ethiopian concrete organizations. The remainder of the MAP have been focused on with less consideration by respondent organizations. The study results further indicate that the independent variables "Cost Management Practice, Budget Management Practice, Performance Evaluation Management Practice, Information for Decision Making Management Practice, and Strategic Analysis Management Practice" are significant in explaining the performance of Ethiopian cement companies. Adopts a mixed research approach to assess the effect of MAP on performance in Ethiopian cement manufacturing firms, converges across qualitative and quantitative methods, and uses purposive sampling to select respondents. The primary data collection technique was utilized in the review to gather data from the management accountants and accountants, head supervisors, and operational administrators that are associated with direction and that require the MA information. Examiners were utilized as a significant information assortment instrument, and information was gathered utilizing techniques taken from various examinations led in a similar region (Ashfaq et al., 2014; Weekes-Marshall, 2011). According to the review, costing rehearsals are the most widely used MAP in Ethiopian concrete organizations, trailed by planning rehearsals. While PA stands out enough to catch the attention of respondent organizations, data for navigation and key examination exercises stand out

even more. Respondents saw that MAP empowered administration to acquire significant data for significant independent direction and that MAP utilized inside the organizations were extremely successful and added to helping their organization succeed. The relapse results show that the free factors "cost management practice, budget management practice, performance evaluation management practice, information for decision-making management practice, and strategic analysis management practice" have a positive and critical relationship with the presentation of "Ethiopian Concrete Organizations" and are huge in making sense of the company's performance.

However, Bangara (2017) completed their study on “Effects of MAP and Performance Measurement on the Perception of Business Performance,” which was a meadow study enclosed by the organized industrial zone of Konya. The primary goal of this study was to look into a linear relationship between the use of management accounting instruments, performance measurement, and the importance level of the performance scorecard among the variables that have an effect on business performance perception. For the study's purpose, the author considered usage of MAP, performance measurement, and the importance level of the performance scorecard as independent variables, while perception towards enterprise performance was taken as a dependent variable. For greater understanding, the authors elaborated on the term “performance of an enterprise.” In the previous study, the first indicator of the success of an enterprise, regardless of its size, was its financial performance. Since financial performance gives accurate and objective results, it is widely accepted as a way to measure business performance. According to Kaplan and Norton (1996), financial performance measurement methods are inadequate at various points. To adapt to the cutthroat climate and the enhancements in assembly techniques, the ventures have started to give significance to non-monetary issues like quality, adaptability, ideal conveyance, consumer loyalty, representative association, cost decrease, benefit amplification, and so forth to acquire and keep an upper hand. At the point when the communication between the examination factors is inspected, a positive relationship is found between the use of the executives' bookkeeping instruments and the view of business execution. Gichaaga (2013) has done his study to examine the effects of MAP on the financial performance of manufacturing companies in Kenya. The nature of the study was a descriptive survey design. From 46 manufacturing companies, Nairobi was selected through a stratified random sampling method where data were collected both quantitatively and qualitatively. To figure out the connection between MAP and the monetary

presentation of assembling organizations in Kenya, he utilized relapse examination, where the MAP were relapsed against the monetary presentation to figure out which practice affect the FP of assembling organizations in Kenya. To measure the financial performance, the author used Return on Asset (ROA), where leverage (ratio of total debt to total assets) and size (natural log (Ln) of total assets) were used as the determinants of financial performance. The MAP cover costing, planning, performance assessment, data for direction and key investigation. He found that in Kenya, the MAP have a critical (79.5%) joint impact on the FP of manufacturing organizations. The creator added that data for dynamic practice fundamentally affected the FP of manufacturing organizations in Kenya also, essential analysis, budgeting, performance assessment, costing, and size respectively.

<Table 3.18 is here>

Reverse Relationship between MAP and Financial Performance

As well as studies sustaining a positive alliance between the use of MAP and performance, other studies found either no association or a negative one. For example, Klammer (1973) analyzed the connection between the complexity of capital planning methods utilized by the firm and execution. No steady, huge relationship between performance and capital planning methods was found. Klammer (1973) contended that the simple reception of different insightful instruments wouldn't convey FP and that those different variables, like “marketing, product development, executive recruitment and training, and labor relations,” are probably going to have a greater impact on benefit. The finding re-affirms the message that modern capital planning techniques don't ensure better execution. Perera et al. (1997) observed that there is no relationship between the utilization of non-monetary measures and execution in plants that follow an assembly system. Ittner and Larcker (1998b) found unobtrusive support for claims that consumer loyalty measures are proactive factors of client behaviour, development in the quantity of clients, and accounting performance. They additionally discovered some proof that firm-level consumer loyalty measures can be monetarily applicable to the securities exchange but are not totally reflected in contemporaneous accounting values. Youthful and Selto (1993) found little proof that the utilization of non-monetary measures in JIT offices was related to contrasts in assembling execution. Gordon and Silvester (1999) used an event-focused approach in the United States to

deal with and investigate the impact on firm value of a statement that organizations were using ABC. They found that the declaration of ABC use didn't influence stock qualities. This outcome is additionally upheld by Ittner et al. (2002), who found broad ABC use has no critical relationship with return on resources. Earlier experimental studies provide contradictory evidence on potential links between the degrees of utilization of MAP, either exclusively or aggregately, and execution. Anyway, on balance, proof of a positive relationship surpasses negative or dubious outcomes. Considering this equilibrium of proof and the fact that the goal of a MAP is to help the managerial practice in firms, firms will anticipate a positive result from the execution of MAP. A theory is in order in light of a positive relationship among the MAP and sustainable financial performance.

H2: There is a significant and positive relationship between the use of MAP and financial performance.

H2a= There is a significant and positive impact of costing on financial performance.

Alternative Hypothesis= There is no significant and positive impact of costing on financial performance.

H2b= There is a significant and positive impact of budgeting on financial performance.

Alternative Hypothesis= There is no significant and positive impact of budgeting on financial performance.

H2c= There is a significant and positive impact of performance evaluation on financial performance.

Alternative Hypothesis= There is no significant and positive impact of performance evaluation on financial performance.

H2d= There is a significant and positive impact of decision making on financial performance.

Alternative Hypothesis= There is no positive and significant impact of decision making on financial performance.

H2e= There is a significant and positive impact of strategic analysis on financial performance.

Alternative Hypothesis= There is no positive and significant impact of strategic analysis on financial performance.

3.7 Empirical Studies on Rationalized Decision-making and the Role of Management Accounting

Adler et al. (2000) investigated the impact of management accounting tools on manufacturing enterprises in New Zealand. The study refuted the notion that the efficacy of management accounting should be assessed solely through the utilisation of a singular management accounting technique. The adopted questionnaire was created by combining different management accounting methodologies. The analysis was conducted based on insights gathered from 165 companies. The participants were mandated to express their viewpoints regarding the utilisation and significance of management accounting on a scale ranging from one to five. The early findings indicated a prevalent utilisation of traditional management accounting techniques in contrast to contemporary and inventive approaches. The ineffectiveness of management accounting was attributed to the lack to employ novel ideas and techniques non the field of management accounting. These novel techniques and instruments should focus primarily on the collection, processing, and sharing of information, as well as the compilation of reports. These findings emphasised the significance of implementing sophisticated and inventive systems that can facilitate the efficient use of management accounting in organisations.

Anand et al. (2004) derived insights from a cohort of 53 financial managers located in India. The study posited that the primary purpose of providing specialist management accounting information is to address specific issues that impact organisations. The study specifically examined the impact of activity-based costing (ABC) on cost reduction. The study revealed that managers have the ability to obtain precise information regarding the profit and expense schedules of the firm. Additionally, it was noted that there was a significant deficiency in the specifics of budgeting and benchmarking. This highlights the necessity of gathering additional data by utilising management accounting. Consequently, it recognises the function of management accounting in gathering information. Furthermore, the research also recognised that the utilisation of diverse accounting

techniques will continue to be considerably efficient provided management accounting functions are effectively incorporated into the process of making decisions. Abdel-Kader and Luther (2006) derived insights by analysing the consequences of management accounting in the beverage industry. Abdel-Kader and Luther contended that the application of management accounting is contingent upon a specific set of circumstances. Consequently, they deemed it necessary to prioritise these elements in order for enterprises to make educated decisions. The aforementioned findings were derived from a comprehensive examination of 245 individuals employed in the beverage industry within the United Kingdom. Management accounting has been determined to have a crucial part in organisations. Nevertheless, it was observed that all management accounting techniques were crucial for organisations, regardless of whether they were employed for improving performance or making decisions. This demonstrates that management accounting procedures can serve multiple objectives, and their significance depends on the precise application they are utilised for. In a study conducted by Chand and Dahiya (2010), data was gathered from 63 distinct companies that implemented the ABC method. The objective was to analyse the decision-making process of Indian enterprises in selecting between modern and traditional management accounting procedures. The analysis revealed that the choice to employ both strategies primarily sprang from the necessity to control expenses and enhance the company's financial performance.

However, the decision to pick between the two was mostly based on the fact that only one strategy is capable of efficiently fulfilling these aims. The transition from old to current management accounting techniques is thought to significantly enhance cost control and enhance the financial performance of the organisation. The established findings also indicated that the level of overhead costs, company size, competitive pressure, and the extent of customisation were significant factors that influenced the adoption of Activity-Based Costing (ABC) among Indian enterprises. All these criteria revolve around the overarching concept that firms acquire, process, and communicate information in order to focus on these specific traits. Hence, the utilisation of management accounting can significantly contribute to the success of organisations by ensuring the proficient and streamlined gathering, analysis, and dissemination of information. In their study, Isa and Thye (2006) analysed the several factors that contribute to the effects of management accounting. These factors include the consideration of overhead expenses, the size of the company, the amount of rivalry, the production process, and the variety of products. This entailed the analysis of concepts

presented by management accountants, general managers, and chief executive officers from 75 manufacturing companies in Malaysia. The participants were requested to evaluate their perspectives on the most effective management accounting techniques in relation to Kaizen Costing, ABC, and Target Costing. The report neglects to acknowledge the significance of management accounting positions. This is due to the efficacy of management accounting functions in influencing organisational characteristics, such as decision-making.

Therefore, in order for managers to make crucial decisions, it is imperative for them to take into account the functions of management accounting. This paper contends that the significance of Kaizen Costing, ABC, and Target Costing hinges on the capacity of management accounting to fulfil their functions. Recommendations indicate that managers should invest additional resources towards more productive activities, necessitating their support. Management accounting has demonstrated its effectiveness in decision making when managers are furnished with all the necessary resources. Salawu et al. (2012) examined the utilisation of management accounting in Nigeria. Their study aimed to determine the rationale for organisations' preference for contemporary management accounting approaches over conventional methods. Therefore, it was emphasised that the reason for the adoption of contemporary accounting methods is the failure of traditional accounting processes to give the needed cost information. The findings of this study do offer evidence that the influence of management accounting in enterprises is partially independent of the external factors. A majority of over 60% of the employees concurred that an escalation in organisational activity leads to a heightened demand for additional information within organisations. Management accounting enables the acquisition of such information by facilitating its collection. Additionally, it is understood that a rise in overhead expenses and competition necessitates the gathering, analysis, and presentation of fresh data through high-quality reports and standardised methods. The findings so concluded that contemporary management accounting systems can enhance the collection, processing, and communication of information. Conversely, the study acknowledged that the implementation and use of ABC costing might be costly and intricate.

Consequently, this motivates additional companies to embrace and implement contemporary management accounting techniques instead of alternative approaches. Consequently, contemporary management accounting techniques must possess the ability to gather, analyze, and

convey a greater amount of information compared to conventional methods. Moreover, organizations are likely to benefit more from the utilization of management accounting. Hence, the advantages of ABC costing and other contemporary management accounting techniques are more significant in the long term rather than the short term. The results corroborated the research conducted by Isa and Thye (2006) and emphasized that managerial support and resource availability are the primary catalysts for enhancing effectiveness in the utilization of management accounting methods. Recommendations indicate that managers should provide additional resources to activities that yield higher productivity. This necessitates managerial support as well. Thanju (2009) conducted an evaluation of the elements that stimulate the utilization of management accounting in hospitals in Kenya. The utilization of management accounting was deemed to have been influenced by environmental shifts. The study is predicated on the notion that there exists a deficiency that must be addressed regarding the use of management accounting within the hotel business. This study acknowledges the existence of a gap in the research on the functions of management accounting in the telecommunications industry that needs to be addressed. Furthermore, the study posits that the adoption of management accounting is a consequence of environmental changes, leading to the emergence of novel determining factors. The study's other findings indicate that the utilisation of management accounting is mostly driven by regulatory legislation, board members, financial targets, and technological advancements.

However, the primary reason for the use of various management accounting approaches is the presence of resources. Organisations with greater resources are more capable of effectively utilising sophisticated management accounting procedures. Conversely, it was found that the inability to obtain important information, excessive regulatory limitations, insufficient communication, and a shortage of competent workers were the primary obstacles to implementing contemporary and efficient management accounting methods. The results diverged significantly from the conclusions given by Isa and Thye (2006) and Salawu et al. (2012) as they placed particular emphasis on the significance of having sufficient cash to execute the intended strategies. The inadequate financial resources impede the optimal utilisation of management accounting by companies. Tewodros (2009) conducted a study which argued that management accounting can be utilized to efficiently make decisions and control organisational activities. The fundamental concept was that management accounting can facilitate the gathering of crucial data. The

information is subsequently processed and disseminated to other management, who utilize it to make logical decisions.

Management accounting has evolved from a role focused on keeping score or counting beans to a more business-oriented function (Warren & Parker, 2009). It provides information about an organization's internal processes through data analysis, complementing financial accounting which focuses on external flows. This comprehensive analysis makes management accounting a valuable tool in the decision-making process (Jarvenpaa, 2009). The information given by management accounting is crucial for effective decision-making and overall management of a company. The primary objective of management accounting is to furnish the management with pertinent information, facilitating oversight of activities and aiding in decision-making. Management accounting is regarded as a tool that simplifies the functioning of capitalism by fulfilling the need for information (Diaconu, 2002). The successful execution of an economic activity relies on the deployment of operative, precise, and comprehensive information in the decision-making, implementation, and control processes. In this environment, it is essential to have an accounting management system that not only provides the required information but also caters to the demands of the manager (Iacob & Karim, 2013). However to analyse the mediating effect of RMDs on FP, the following hypothesis has been developed.

H3: RMDs can mediate the effect of MAP on FP.

Alternative Hypothesis: RMDs cannot mediate the effect of MAP on FP.

H3a (similar with H_2): MAP have a positive and significant impact on FP

Alternative Hypothesis: MAP have no positive and significant impact on FP

H3b: MAP have a positive and significant impact on RMDs

Alternative Hypothesis: MAP have no positive and significant impact on RMDs

H3c: RMDs have a positive and significant impact on FP.

Alternative Hypothesis: RMDs have no positive and significant impact on FP.

3.8 Connection with MAP & RDM

The Management Accounting Practice (MAP) have been at the center of enhancing rationalized decision making in the manufacturing system in Bangladesh through provision of relevant, timely and strategically aligned financial and non-financial information. With the increasing cost of manufacturing amid the pressure of exports, interferences with supply chain and technological shifts, firms are forced to rely on systematized information systems that minimize uncertainty and direct managerial decisions (Susilowati, 2023). Budgeting, variance analysis, cost volume profit analysis, standard costing, performance measurement systems, and strategic management accounting, in turn, constitute essential tools that can help managers assess alternatives, make predictions and choices that lead to optimal efficiency and profitability. These systems make sure that the decisions are not made on the basis of intuitions or informal practice, but on evidence-based appraisals, which are consistent with the rational decision-making models.

Within the Bangladesh context, where most manufacturing organizations use either informal or traditional accounting systems, the use of MAP greatly improves the internal quality of decisions. Costing (e.g., job-order costing, activity-based costing and process costing) allow companies to learn the real cost of production, waste identification and determination of profitability of a product. This becomes critical in the rational pricing and allocation of resources particularly in areas like garments, textiles, plastics, pharmaceuticals and food processing where the cost pressure and worldwide competition are high. Budgeting and budgetary control systems also help in rational decision-making process as operational activities are synchronized with the strategic goals, variances are monitored and corrective measures taken. Companies with systematic budgeting procedures are able to maximize working capitals, control cash flows, and curb operations risks actions that are in line with logical prospective managerial decisions (Akhter et al., 2025).

MAP are also associated with rationalized decision making through enhancing transparency and internal accountability. The variance analysis enables managers to compare the planned performance and the actual performance systematically, to establish inefficiencies, and the causes of the deviations. This decision-making process allows making reasonable decisions because it will help to make a decision that is not based on a subjective judgment or a certain position of influence but rather on objective measures of performance. In the same manner, the incorporation

of such non-financial performance indicators in modern MAP quality measures, lead time, customer satisfaction, machine utilization, and defect rates help to make rational decisions regarding productivity improvement and process optimization (Chowdhury et al., 2024). The balanced scorecard and other strategic management accounting tools will give a holistic picture of performance and hence managers will be able to measure long term competitiveness not only financial outcomes in the short term.

In the case of export-oriented manufacturing companies in Bangladesh, the rational decision making that exists because of MAP is also vital towards the adherence to the global standards of ISO certification, lean manufacturing and sustainability reporting. The frameworks demand documentational hierarchy, cost management and factual reviews all of which are enabled by efficient management accounting systems. With Bangladesh moving to Industry 4.0 technologies, MAP become an even more essential component that enables the integration of data, real-time monitoring, and strategic predictions. Finally, MAP assist manufacturing companies to shift the processes of decision making to be reactive and based on decisions, to the proactive and rational and strategy aligned decision making processes. This change plays an important role in ensuring that it remains competitive in the domestic as well as international markets.

3.9 Conclusion

Overall, Chapter 3 has reviewed the literature related to the three research questions. The literature review for the first research question is: “What is the extent of the use of MAP by manufacturing companies in Bangladesh?” demonstrated that MAP reviews researched their organizations in both developed and developing countries. The study overview also saw that standard MAP are extensively used by affiliations no matter what their responses to their shortfall of importance and that the usage of as of late advanced MAP is growing, yet the take-up is as yet postponed in most evolved and developing countries. The review also identified a significant gap in the literature related to the use of MAP in the manufacturing industry, especially in developing countries. In Bangladesh, the research about MAP and its special areas, like “costing, budgeting, performance evaluation, information for decision-making and strategic analysis,” has received very limited attention. Therefore, addressing the first research question of the thesis will add to existing knowledge about the uptake of MAP in manufacturing companies in Bangladesh. The literature

review for the second research question is “What internal contingent factors affect the extent of the use of MAP by manufacturing companies in Bangladesh?” highlighted the types of contingent factors used in the contingency theory context of MAP and manufacturing companies. The literature review demonstrates the way that the utilization of MAP can be affected by various contingent elements. The lion's share of the past examination recommended a positive relationship between these elements and the utilization of MAP. The survey perceived a critical hole in the writing connected with possibility factors that influence the degree of purpose of MAP inside manufacturing areas. Tending to explore question two of the proposal will add to existing information about factors impacting the utilization of MAP in developing nations inside the setting of the manufacturing area. For this purpose, five potential contingent variables for determining factors that may affect the level of use of MAP within the manufacturing sector's environment were identified. The review of the current circumstances of knowledge relating to the third research question, “What is the impact of management accounting practice on the financial performance of manufacturing companies in Bangladesh?” suggested that there is a positive association between the use of MAP and firm performance, although it was acknowledged that there are a minority of studies that present negative or inconclusive results. The next research question is, is it possible for the manufacturing industries in Bangladesh to mediate with RMD n the relationship between MAP and FP? However, the review also discovered that, while the majority of studies used objective financial measures of performance, there were instances of research using perceptual measures of performance in samples where subjective measures were unavailable. This study compares the relation between the subjective and objective measure of financial performance. The review also discovered a significant gap in the literature regarding evidence on the relationship between the use of MAP and firm performance among manufacturing firms, particularly in developing countries. To address research question three of the thesis, this study have been added contribution understanding of the possible relationship between the use of MAP and the performance of

Chapter 4

Methodology of this Study

4.1 Introduction

Methodology has a very significant role for any research work. It enables a researcher to collect valid and reliable data and shows the way of result analysis. It also enables to analyze the data in order to reach a valid and correct decision. In methodology, researcher systematically analyzes the methods which are applied for the research purpose. It ensures a researcher that the results are valid and dependable. Methodology helps to meet the research questions and research objectives. Methodology helps to determine the data analysis technique and ensures the reliability of results and findings of research.

4.2 Research Philosophy

Research philosophy deals with the analysis concept as well as the research roadmap. The subject of research philosophy is vast, so we won't go into detail about it here. Research methodology is related to uncertainty, data, and survey design. It deals with the precise method of handling data creation. The fact that examiners may have different hypotheses about the likelihood of truth and that information and thought assist us in separating out their assumptions should be taken into consideration when deciding how to resolve this matter generally. The organization of the source, nature, and improvement of data is aided by research philosophy. In fundamental terms, research philosophy is feeling about the way data about an idiosyncrasy should be assembled, took apart and used. Yet the chance of data creation could appear, apparently, to be critical, we are participating in data creation as a part of completing our exposition. We will gather support and essential information and take part in information examinations to respond to the exploration question and this answer denotes the formation of new information. However, this research conducted on MAP in manufacturing industries in Bangladesh. It is research based on primary data, and secondary data was used in required section. The questionnaire-based survey helps to collect primary from the selected manufacturing company. The key research questions are being utilized the concept of extent use of MAP and contingency factors which are largely influenced on MAP in Bangladeshi manufacturing companies.

4.3 Research Paradigm

In this study, the management accounting practice has been analyzed based on the contingency theory. At the meantime, this study also mmeasuresthe impact of management accounting practice on financial performance of manufacturing companies in Bangladesh. The contingency theory has been considering the practice of costing system, budgeting system, performance evaluation of the staff and other members, decision making, and strategic analysis. However, a costing system is intended to track a company's expenses. The framework includes a plethora of structures, dynamics, controls, and reports that are designed to total and inform the board on incomes, expenses, and benefits (Kaplan, 1994; Shields, 1998). A cost accounting framework (also known as a product costing framework or a costing framework) is a business structure used to assess the cost of their products for productivity analysis, stock valuation, and cost control (Abdel-Kader & Luther, 2006; Ali, 2010). Product cost estimation is critical for productive tasks. A company should understand which goods are beneficial and which are not, and this can only be determined after determining the correct cost of that good and service. However, two major cost accounting frameworks exist: job order costing (JOC) and process costing (PC) (Edwards & Newell, 1991; Haldma & Lääts, 2002). Furthermore, a budget is a tool used by managers to plan and control the use of scarce resources (Abugalia, 2011). A financial plan or budget is an arrangement that shows how management intends to acquire and use resources to achieve the organization's goals (Ahmad, 2014; Anessi-Pessina et al., 2016). Making plans for future productivity is part of the planning system because obtaining a reasonable profit from assets used is an important organizational goal. A financial plan or budget is a plan that outlines how management intends to acquire and use resources to achieve the organization's objectives (Alleyne & Weekes-Marshall, 2011; Al & McLellan, 2011). Furthermore, performance evaluation is expected through management accounting, where performance appraisal is a major concern, to determine whether management's decisions are both valuable and moral (Dianati Deilami et al., 2016). This is a two-tiered moral investigation that requires a noted to lay-out and execute, as the assessment framework, like the dynamic interaction, should also work in a moral design. In many organizations, the general consequences of decisions made by an institution's board of directors should be examined, in addition to the subsequent benefit, to determine whether the choices are reasonable. Furthermore, in management accounting, decision making strategy can be simply

defined as selecting a game plan from a set of options (Drury & Tayles, 1995; Guilding, 2000). A premise hypothesis states that the best decision is the one with the most income or the least amount of cost (Wu et al., 2007; Rogošić & Ramljak, 2012). The initiative of the executives, with the assistance of the management accountant, is to be considered the best alternative option. Furthermore, strategic analysis in management accountants is in a unique position to participate in and lead the critical investigation process.

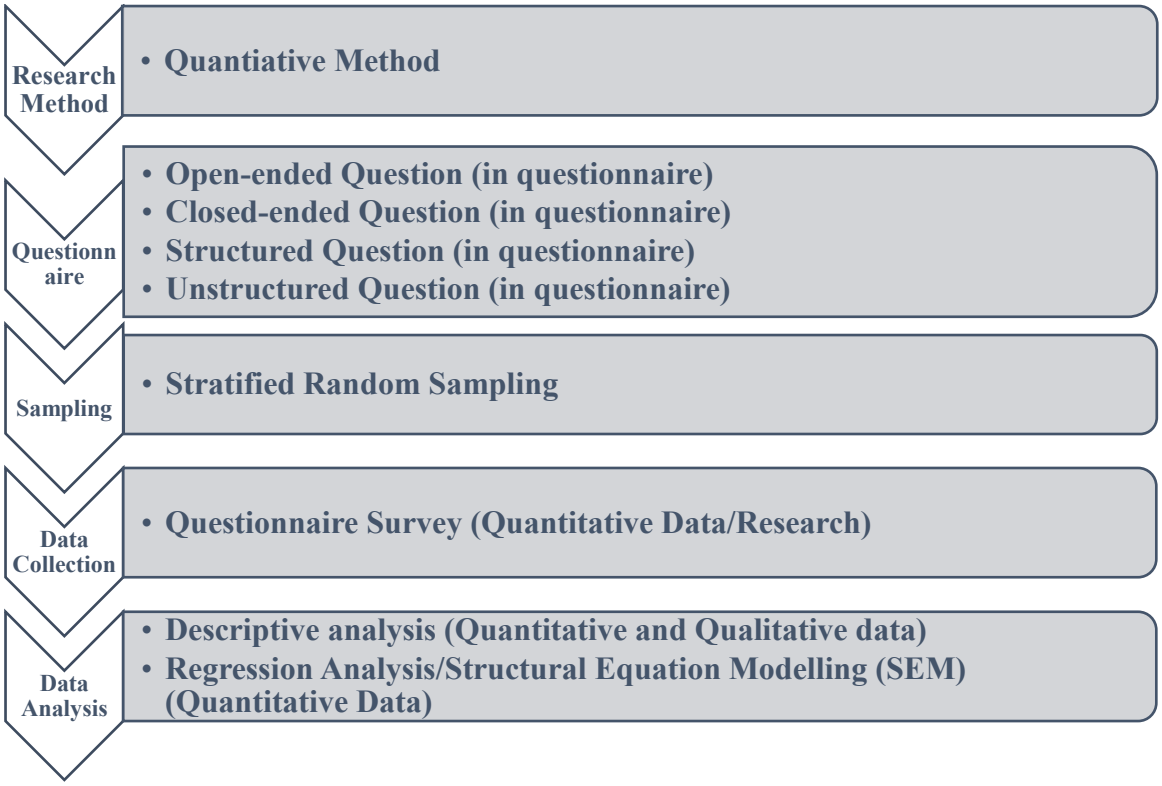
Whatever, the key hypothesis assumed as null hypothesis (H_1), H_1: There is a positive relationship between the financial performance and the use of management accounting techniques where the initial aim of this study to reject the null hypothesis through statistic and econometric approaches. However, the financial performance of the manufacturing firms in Bangladesh has analyzed by considering those criteria such as, costing system, budgeting system, performance evaluation, decision making, and strategic analysis which are commonly practice in management accounting.

4.4 Research Design and Research Approach

4.4.1 Research Design

A research design is known as the blueprint of a research. A research design outlines (in Figure 1) the main steps in carrying out the task. In particular, an investigation design should provide relevant data that will most effectively and thoroughly address the research questions or theories that are used in a specific study (Hair et al., 2007; Sekaran & Bougie, 2016). To complete a research project, there are three distinctive research designs: exploratory; descriptive; and causal. Of these three, descriptive; and causal research plans match the need to give the pertinent data to the research questions of this study and theories. Quantitative/descriptive data are expected to investigate the research objective such as: to identify currently practiced management accounting practice in Bangladesh from managerial perspective; to explore the extent use of the management practice characteristic on management accounting practice in Bangladesh and to investigate the impacts of MAP on financial performance of the manufacturing companies in Bangladesh. Causal exploration which can likewise be named as explanatory research where the dependent variable are examined by the one or more independent variables and test whether one variable like independent variable is answerable for changes in another variable like dependent variable (Perry,

1998). The requirement for this examination configuration mirrors the three objectives created in this study where both dependent and independent factors are associated with request to frame the expected connections. In particular, the principal assumption will test the connection between chose possibility factors (independent factors) with the degree of the utilization of MAP in financial performance (dependent factor). Hence, given the requirements for data and theories testing, this examination requires a descriptive and causal/regression research plan to work with addressing these necessities to measure the managerial accounting practice in manufacturing industries in Bangladesh. However, this study has been conducted based on primary data and secondary data where it is required. Primary data were collected through different mechanisms or utilize different research tools and technique. The overall research tools (major research tools) and process has been shown by the following Figure 4.1.



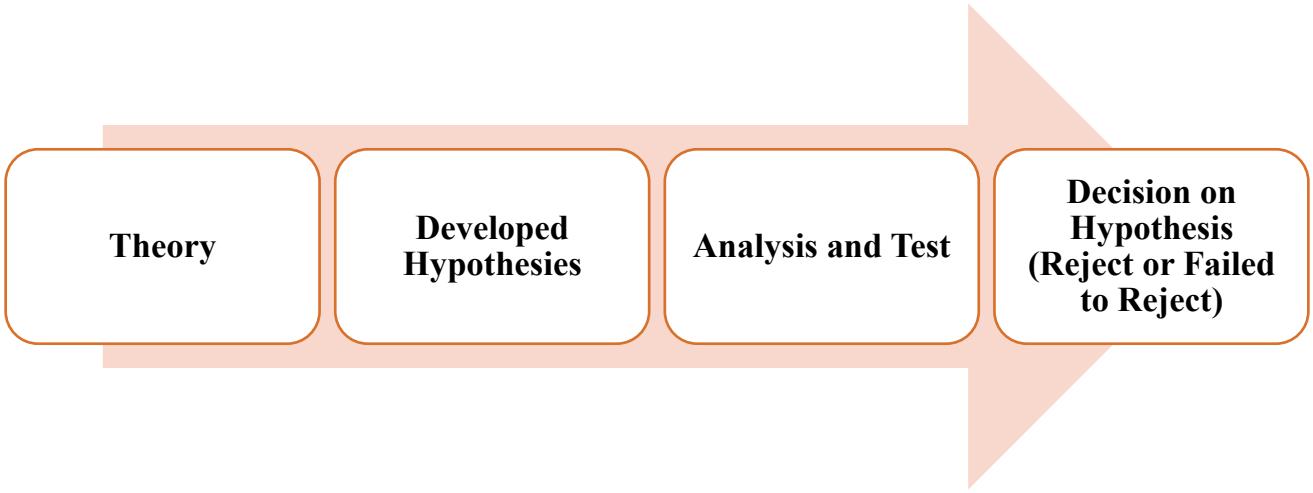
Source: Authors Estimation

Figure 4.1: Flow Diagram of this Research

4.4.2 Research Approach

Research approach (RA) to foster important, indisputable explanations, ones that can effectively make sense of the circumstance of concern or that depict the causal connections of research interest based on dependent and independent factors (Amaratunga et al., 2002). Individual researchers have an opportunity of decision. As a result, the researchers are free to select the strategies, methods, and systems of investigation that best address their issues and objectives. A research strategy is a plan and methodology that includes broad assumptions for analysis as well as a detailed method for data collection, analysis, and translation (Teherani et al., 2015). As a result, the approach of information investigation or thinking is based on the idea of the examination issue being tended to. To put it another way, research approaches are research plans and frameworks that range from expansive speculations to explicit methods for information assortment, assessment, and perception. The overall decision incorporates which approach should be used to focus on a subject. Enlightening this decision should be the philosophical doubts the researcher brings to the audit; system of study (this is called research plans); and express investigation methods for data collection, assessment, and exhibit. The decision of an exploration approach is moreover established on the possibility of the assessment issue or issue being tended to, the researcher's very own encounters, and the stakeholders for the study for the region. In generally there are three approaches, namely quantitative, qualitative and mixed methods to conduct research on the other hand deductive, inductive and adductive research approaches are also used in modern research. As indicated by Gratton and Jones (2009) deductive research methodology includes testing of a pre-decided hypothesis, clarification or theory. This approach assists scientists with finding out a theory by utilizing existing speculations. Existing data is analyzed to acknowledge or dismiss the speculation to accomplish the exploration points (Johnson & Gill, 2010). Logical exploration is an engaged strategy for testing theories. It offers likelihood to make sense of causal connections between the ideas and the factors. This sort of exploration is frequently faster to lead also.

In this study, deductive approaches have been used to analyze the developed hypothesis. Deductive research approach implies investigating the research objectives, assessment of result justification. Think critically to analyze the hypothesis based on existing theory and practice. Enquiry of research hypothesis has been focusing on the deductive approaches because we have practice the existing theory like as practice of contingency theory for enhancement of MAP. The process of deductive research approach has been shown in the following Figure 4.2.



Source: Author Estimation

Figure 4.2: Deductive Research Approach

4.5 Measurement of Variables

4.5.1 Measurement and Scale

The overall questionnaire was developed in several sections such as first section has been shown the company profile and addressing which is required. The second phase developed questions based on the extent use of MAP. At the same time, another section has been developed to investigate the contingency theories. The next part of the questionnaire was performance of firm/financial performance of firms. The measurement scale contains Likert scale to represent the weight of the respondent opinion. However, at the first stage, there are some open ended questions have been used in questionnaire due to addressing and mentioned the company profile. Second phase the respondent are provided there valuable information through a scale process for the measuring the extent use of MAP. In this section, scale for measuring the Aspect: Never=1,

Rarely=2, Moderate=3, Often=4 and Very Often=5. Scale for measuring the Application: strongly Disagree =1, Disagree =2, Neutral =3, Agree =4, Strongly agree =5. The next section (contingency theory) was considered the following scale: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4, Very large extent =5.

4.5.2 Measurement of the Research Contingent Factor

The first contingency factor of this study is organization size. Organization size is characterized as log of total asset value, but organization size can likewise be estimated by the settled up capital of the firms (Tuanmat & Smith, 2011). Ahmad (2012) analyzed 110 Malaysian organizations in the assembling area. The finding of the review uncovered that firms size fundamentally affects MAP in business tasks in light of the fact that bigger firm have more noteworthy assets to work with MAP. The analysis additionally discovered that large firms required more far reaching MAP in manufacturing organizations. A concentrate by Ismail and Mahmoud (2012) that inspected firm's size with MAP in Egyptian manufacturing organizations establish that main few manufacturing firms that have embraced present day MAP since current MAP are composite to Egyptian manufacturing firms. In addition, in the exploration by Mbawuni and Anertey (2014) analyzing MAP in telecommunication firms in Ghana, it was found that the degree of the utilization and purposes behind reception of MAP in Ghana relied upon the nature and organization size. There are some researches such as Shahzadi et al. (2018), Abba et al. (2018), Pham et al. (2020) also investigate the firms size as factors of MAP. However, in this study, the size of firms has been consider the following scale to analyze the financial performance: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4, Very large extent =5. The questionnaire of this study contains such type of question such as "to what extent do you think that organization's size (log of total asset value) influence the extent of the use of management accounting practice for your firm?"

The second contingency factor of this study is organization age. Age of the firms defined the log of years of operation. The production of firms intended to expand the firm size with respect to time, this time defined as the age of the firm. Market share of a firm has been raised due to numbers of operation age of that particular firm. Age of the firm as a contingency factors of MAP to determine financial performance has been analyzed by Oyerogba (2015), Msomi et al. (2019), Shil

et al. (2021) and others. However, the size of firms has been considering the following scale to analyze the financial performance where age of the firm's operation is used as contingency factor: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4, Very large extent =5. The questionnaire of this study contains such type of question such as "To what extent do you think that organization's age (Years of operations) influences the extent of the use of management accounting practice for your firm?"

The third contingency factor of this study is ownership and manager practice of MAP. Owner of firms should have the knowledge of MAP in the sense of operate a firm and maintain the duties of firms such as tax payment, decision making, critical activities and others. An owner practice of MAP is a significant factor of contingency analysis. there are numbers of study has been considered the owner practice of MAP to enhance financial performance such as Ahmad and Zabri (2015), Otley (2016), Krishnan et al. (2021). Whatever, the owner participation of MAP in a firm has been considering the following scale to analyze the financial performance where owner practice of MAP is used as contingency factor: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4, Very large extent =5. The questionnaire of this study enclosed such type of question "to what extent do you think that owner/manager influence the extent of the use of management accounting practice for your firm?"

The fourth contingency factor of this study is qualified accounting personnel, which has significant impact on financial performance of a company. Qualified person or staff taking into account as a contingency factor MAP that means the efficient person should have knowledge on MAP as well as theories those are related. Qualified person as an important factor that statement was supported by Grötsch et al. (2013), Oyewo (2017), Krishnan et al. (2021). The qualified accounting personnel in a firm has been considering the following scale to analyze the impact on financial performance where qualified accounting personnel for firms operation is used as contingency factor: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4, Very large extent =5. Qualified accounting personnel consider the educational qualification such as BBA, MBA, BSS, MSS, CA, FCA and other academic qualifications. The questionnaire of this study involved such type of question "to what extent do you think that highly qualified accounting personnel influence the extent of the use of management accounting practice for your firm?"

The fifth and last contingency factor of this study is practice of technology and technological assistance. This factor defines the modern uses of MAP and other accounting tools which is developed due to time and due to technological advancement. This factor has significant impact on financial performance of a company because of technological necessity. Hyvönen (2013), Abd Wahab (2019), Cleary et al. (2022) have been focus the significance of ICT on MAP in several states. Uses of technology answered by the respondent 1=No and 2=Yes. However, the technological practice in a firm has been considering the following scale to analyze the impact on financial performance where technological practice for firms operation is used as contingency factor: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4, Very large extent =5. "To what extent do you think the use of Information technology influence the extent of the use of management accounting practice for your firm? This question has been answer by the respondent to assure the technological assistance in that particular field.

4.5.3 Measurement of the Extent of the Use of MAP

The focal idea of extent use of MAP characterizes the MAP was partitioned into the accompanying classes of the MAP practice (procedures) such as: costing, performance evaluation, decision making and strategic planning. Such order was gotten particularly from Anderson and Lanen (1999) and content of broadly involved research in MAP, for example, Drury (2012), Strohhecker (2016), Hajiha et al. (2020). In the survey, every class of MAP compares to the battery of inquiries posing to respondent to rate the application in their firm on the scale. The total score for every class (for example cost order; functional planning; functional execution detailing; strategic analysis) was determined by adding the scores that were appointed to the specific inquiries by respondent. The possible explanation for using simple likert scales to ascertain overall assessment of the MAP techniques was due to their formative (or emergent) nature, as discussed by Ali (2010): "the construct is comprehended to be formed by a series of fundamental indicators, in which case a census of indicators is required in order to describe the construct" Albu and Albu (2012) used the same strategy. A firm should be practice the MAP because of profit maximization strategy or cost minimization strategy. Now the extent of MAP has been detail analyzed in the following sections:

a) Costing System

The costing system is emphasis the all types of costs including all variable cost, all fixed cost all direct and indirect costs. There are two segments have been used to justify the costing system such as aspects of costing system and application of costing system. Aspects of costing system analyze the methods of costing systems which are involved in MAP for the manufacturing industries in Bangladesh. On the other hand, application of costing have been utilized the exercise of costing system of the MAP in manufacturing sector. The questions are scaling in aspect of costing system section considered the major costing issues based on fixed, variable , direct, indirect and others costs.

- Department or multiple plant-wide overhead rates
- Separation of variable cost, incremental cost and fixed cost (Variable/ Marginal costing)
- Job order costing
- Batch costing
- Process costing
- Absorption Costing/ Full cost accounting
- The cost of quality (Quality Costing)
- Attribute costing
- Cost-benefit analysis
- Service costing
- Contract costing
- Uniform costing
- Activity based Costing (ABC)
- Standard costing
- Target Costing
- Life Cycle Costing
- Differential costing
- Opportunity Costing
- Value Chain Costing
- Back-Flush costing
- Throughput Costing
- Six sigma
- Kaizen Costing
- Operational Costing

Source: Those costing tools are used by Haldma and Lääts (2002), Angelakis et al. (2010), Azudin and Mansor (2018), Jariya et al. (2021).

The questions are scaling in application of costing system section considered the major costing issues based on practice of costing system. The applications of this system has been followed in the following segments: centralized the costing system, costing system of support services exists with a high degree of integration among departments, specified goals and objectives are established for costing system, influence on financial performance (ROE, ROA, ROI, NPM) of this company and others.

b) Budgeting

Budgeting is regarded as an essential technique in management accounting practice for planning and controlling an entity's ability. It is a useful tool for management accountants for supply chain, resource deployment, slowdown management, cost control, and so on. In this research, there are two segments of questions are implied in questionnaire to evaluate budgeting system such as aspect of budgeting and applications of budgeting system in manufacturing companies in Bangladesh. Budgeting practice in extent use of MAP are supported by Cuzdriorean (2017), Alvarez et al. (2021) and others. Aspect of budgeting system has been considered the following issues:

- Activity-based budgeting (ABB)
- Zero-based budgeting (ZBB)
- Continuous/rolling budget
- Budgeting for long term(strategic) plans
- Budgeting with “what if analysis”
- Budgetary Control
- Budgeting for (short term) planning
- Budgeting for controlling cost
- Master budgets
- Flexible budget

Source: Cuzdriorean (2017) and Alvarez et al. (2021)

Applications of budgeting system define the practice of budgeting system in the particular company. However, the questionnaire has been considered the following issues to analyze the application of budgeting system: achieving company's goals and objectives for preparation of budget, proper training and development programs, involvement of stakeholders, and implication on financial performance of the respected company.

c) Performance Evaluation

Performance evaluation is an important function of management accounting that is primarily used in business entities with a departmental organizational structure. It provides managers with information to help them accomplish their company's strategic goals. There are two segments of questions are implied in questionnaire to evaluate performance evaluation system such as aspect of performance evaluation and applications of performance evaluation system in manufacturing companies in Bangladesh. However, aspect of performance has been categories in financial and nonfinancial scale. Aspect of performance evaluation has been considered the following issues:

Financial measure(s)	**Non-financial measure(s)**
• Cash flow Statement Analysis	• Non-financial measure(s) correlated to customers
• Ratio Analysis	• Non-financial measures(s) associated to operation and modernism
• Income Statement & Balance sheet Analysis	• Non- financial measure(s) correlated to employees
• Variance Analysis	• Segment Reporting
• Fund Flow Analysis	• Balance Scorecard

Moreover, applications of performance evaluation system describe the participation and observation of performance in the particular company. However, the questionnaire has been considered the following issues to analyze the application of performance evaluation system: highest potential for the firm's objectives and uses benchmarks helps in competitor's analysis to improve its competitive edge, shareholders value, incentive and awards to the staff and other administrative and others.

d) Decision Making

Information for direction includes interaction of providing the chiefs with important information which will be valuable to apportion assets, settling on choice, checking and assessing execution. It is review by giving input about past tasks and planned by predicting future occasions. Decision making system is help to prevent the upcoming uncertainty of a company (Khaliq et al., 2021; Nartey & van der Poll, 2021). There are two subdivisions of questions are implied in questionnaire to evaluate decision making system such as aspect of decision making and applications of decision making system in manufacturing companies in Bangladesh. However, aspect of decision making has been focus on decision making strategies, efficiency, awareness and sustainability. Aspect of decision making system has been considered the following concerns:

- Product profitability analysis
- Cost-Volume-Profit Analysis
- Stock control models (Inventory)
- Evaluation the risk
- Evaluation of major capital reserves
- Evaluation of pay-back period or average rate of return and non financial aspect.
- Cost of capital
- Performing sensitivity

Source: Khaliq et al. (2021) Nartey & van der Poll (2021)

Furthermore, applications of decision making system imply the practical implication of a decision which is best for a company as well as the stakeholders of that particular company along with countryside and outside of the country. However, the questionnaire has been considered the

following issues to analyze the application of decision making system: provides timely information, reduce future uncertainties, calculation of the breakeven point, valuation and analysis of company product and services; assist in financial performance and others applications.

e) Strategic Analysis

Strategic analysis in MAP is a broader focus and a longer-term perspective that generates significant value to the company. It integrates both financial and non-financial data, both previous and future, gathered from external and internal sources of a company. Strategic analysis means the strategy followed by the authority to operate a business event and the following strategic tools have been recommended by Hadid and Al-Sayed (2021), Dasanayaka et al. (2021), Ojra et al. (2021). However, two several dimension were used to analyze strategic event of the company in extent of MAP in Bangladeshi manufacturing companies. Data was collected through questionnaire method with list of structured question in the dimension of aspect of strategic analysis and application of strategic analysis. Aspect of strategic analysis has been contained the following issues:

- Shareholder value
- Industry analysis
- Inter-firm Comparison
- Long-range forecasting
- Analysis of competitive position
- Value chain analysis
- Product life cycle analysis
- Just In Time
- Brand valuation
- Strategic Pricing
- Strategic costing
- Responsibility Accounting
- Transfer pricing
- ERP
- HRA
- Environmental management accounting (EMA)

- Risk Management
- Analysis of competitors' strength and weaknesses
- Customer Accounting
- Benchmarking
- Customer profitability analysis
- Process Reengineering
- TOC
- MBE
- Lifetime customer profitability analysis
- Valuation of customer as assets

Source: Hadid and Al-Sayed (2021), Dasanayaka et al. (2021) and Ojra et al. (2021)

In addition, applications of Strategic analysis system involve the practical implication of an initiative which is taken by the authority or management. Best strategy for a company as well as the stakeholders of that particular company inside or outside the firms is more crucial. However, the questionnaire has been considered the following issues to analyze the application of Strategic analysis system: facilitate in comparison, strategy on financial performance, application to achieve comparative advantage, reduce operational risk, and maintain the business cycle.

4.5.4 Measurement of the Impact of MAP on FP

Financial performance of a firm has been measured by the use of Return on equity (ROE), Return on Asset (ROA), Return on Investment (ROI) and Net Profit Margin.

Return on Equity (ROE)

However, return on equity means the income or output from the using equity of a particular company (Umelo et al., 2021). ROE has been rising due to proper utilization of MAP strategy which may also helps to national development (De Wet et al., 2007). The questionnaire practice the given question to investigate the ROE performance as a measure of financial performance, "Return on equity, ROE (Net income / Average Equity) has increased over the last five years as a result of application of management accounting practice." To collect data from the each company,

this question investigated by using the following measurement scale where: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4 and Very large extent =5.

Return on Asset (ROA)

Return on asset indicates the return or benefit from the assets that are used by the company (Warrad, 2015; Atidhira & Yustina, 2017). ROA, this was an element of how gainful an association was relative with its finished assets. ROA gives an idea with respect to how capable organization was at using its assets for produce benefit. Not entirely settled by isolating an association's yearly pay by its finished assets. It registered as follows: ROA= Net income (EBIT) / Total assets (expressed as a percentage). ROA lets us know income created from contributed capital (resources. The questionnaire practice the given question to investigate the ROA performance as a measure of financial performance, "Return on Asset, ROA (net income /total assets) has increased over the last five years as a result of application of management accounting practice." To collect data from the firm, this question investigated by using the following measurement scale where: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4 and Very large extent =5.

Return on Investment (ROI)

Return on investment indicates the earning from the investment. The investments define the capital involved in business not only physical capital but also positive and logistic support of a company (Sharkar et al., 2006). Extent use of management accounting, company has the knowledge of safe investment, and highest possible option of return from investment. The questionnaire included the given question to investigate the ROE performance as a measure of financial performance, "Return on Investment, ROI (Net Income / Cost of Investment) has increased over the last five years as a result of application of management accounting practice." To collect data from the particular company, this question investigated by using the following measurement scale where: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4 and Very large extent =5.

Net Profit Margin (NPM)

Net profit margin is such kind of rate which is represents the marginal profit rate of a company (Nulla, 2012). It has implied to know the financial performance of a company it also shows the company's strength and financial weakness (Nariswari & Nugraha, 2020). The questionnaire incorporated the given question to investigate the ROE performance as a measure of financial performance, "Net Profit Margin, NPM (Net Profit ⁄ Total revenue x 100) has increased over the last five years as a result of application of management accounting practice." To collect data from the company, this question was investigated by using the following measurement scale where: Very low extent=1, Low extent=2, Medium extent=3, Large extent=4 and Very large extent =5.

Moreover, financial performance (FA) of a firm has been measured by the use of Return on equity (ROE), Return on Asset (ROA), Return on Investment (ROI) and Net Profit Margin. The factors which are used to measure the financial performance have a great interrelation between MAP because management accounting enhances the financial performance. Better or great extent of MAP able to raise market share as well as profit. Financial solvency of a firm largely depends on the effective practice of management accounting where the financial performance is evaluated through the criteria of return on asset (ROA), return on equity (ROE), return on investment (ROI) and net profit margin.

4.6 Sample Selection Method

Stratified random sampling is a method of sampling from a population that involves dividing the population into distinct subgroups or strata, based on specific characteristics, and then taking a random sample from each of these subgroups. This approach ensures that each subgroup is adequately represented in the overall sample, which can improve the accuracy and reliability of the results. This study follows the stratified random sampling method to determine the sample size. There are total 157 listed manufacturing companies in Dhaka Stock Exchange. There are nine categories of manufacturing companies, which are Cement, Ceramics, Engineering, Food & Allied, Jute, Paper & Printing, Pharmaceuticals & Chemicals, Tannery Industry, and Textile. The eight manufacturing categories are selected for the study. Among these categories a certain number of companies have been selected as the sample. Total sample size is 78 manufacturing companies of Bangladesh from different industries. The companies are selected randomly but maintaining proportion of listed companies (strata) in the share market. This study has considered stratified

random sampling technique where total sample size was 78 which is proportionate to listed companies in capital market as it is enough to represent the whole population. To evaluate the stratified random sampling method, the following steps have been applied. However, stratified random sampling used by Heryanto and Sudibyo (2017), Oyewo (2017), Alvarez et al. (2021) and others researcher in accounting field.

4.6.1 Stratified Random Sampling

STEP ONE: Define the population

STEP TWO: Choose the relevant stratification

STEP THREE: List the population

STEP Four: Choose your sample size

STEP Five: Calculate a proportionate stratification

STEP Six: Use a simple random or systematic sample to select your sample

STEP ONE: Define the population

Listed manufacturing Companies

STEP TWO: Choose the relevant stratification

Table 4.1: Stratification of Population

Stratum	**Cement**	**Ceramics**	**Engineering & Steel**	**Food & Allied**	**Jute**	**Paper & Printing**	**Pharmaceuticals & Chemicals**	**Tannery & Footwear**	**Textile**	**Total**

Source: Author Estimation

STEP THREE: List the population

Table 4.2: List the Population

Number of companies in the block	7	5	33	18	3	4	31	6	50	157

Source: Author Estimation

STEP Four: Choose your sample size

To determine the sample size, this study used statistical tools. The following protocol has been used to determine the sample size.

Analysis: sample size

Input: Tail(s) = Two

Total population = 157

α err prob. = 0.05

Standard deviation is based on the propotion (p) is: 0.975

$\sigma = \sqrt{(p(1-p))} = 0.3129.$

$\alpha = 1 - 0.95 = 0.05.$

Output: Zp = Z0.975 = 1.96, we may instead use Zα/2 = Z0.025 = -1.96.

Total sample size = 78

Calculates the sample size to get the following confidence interval: **proportion ± 0.05**.

The standard deviation is based on the propotion (p) is:
$\sigma = \sqrt{(p(1-p))} = 0.3129.$
$\alpha = 1 - 0.95 = 0.05.$

$$p = 1 - \frac{\alpha}{2} = 1 - \frac{0.05}{2} = 0.975$$

You may use p = α/2, and get the same sample size.

$Z_p = Z_{0.975} = 1.96$, You may instead use $Z_{\alpha/2} = Z_{0.025} = -1.96$.

The required sample size is:

$$n = \frac{Z^2_{0.975} * p(1 - p)}{MOE^2}$$

$$n = \frac{1.96^2 * 0.11(1 - 0.11)}{0.05^2} = 150.4315$$

Rounded up to: **151**.

Since the population size is finite: N=157, the corrected sample size is:

$$n' = \frac{n * N}{n + N - 1}$$

$$n' = \frac{150.4315 * 157}{150.4315 + 157 - 1} = \mathbf{77.0735}$$

Rounded up to: **78**.

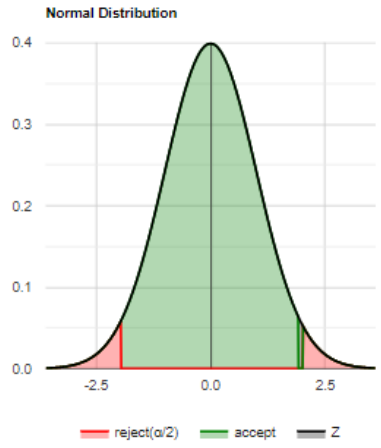


Figure 4.3: Graphical Presentation of Sample Size Determination

STEP Five: Calculate a proportionate stratification

Table 4.3: Sample from Each Stratum

S.N	Stratum	No. of Company in the Strata	Sample from each stratum

1	Cement	7	4
2	Ceramics	5	3
3	Engineering & Steel	33	20
4	Jute	3	01
5	Paper & Printing	4	02
6	Food, Pharma. & Chemical	49	17
7	Tannery & Foot	6	02
8	Textile	50	29
Total		157	**78**

Source: Author Calculation

STEP Six: Use a simple random or systematic sample to select the sample Size

Table 4.4: Categories of the Company (Percent (%))

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
	Cement	4	5.1	5.1	5.1
	Ceramic	3	3.8	3.8	9.0
	Engineering	20	25.6	25.6	34.6
	Tannery	2	2.6	2.6	37.2
	Jute	1	1.3	1.3	38.5
	Paper	2	2.6	2.6	41.0
	Textile	29	37.2	37.2	78.2
	Food & Pharmaceuticals	17	21.8	21.8	100.0
	Total	78	100.0	100.0	100.0

Source: Field Survey 2023

The companies category has been presented in Table 4.4, there are some categories of manufacturing such as Cement, Ceramic, Engineering, Tannery, Jute, Paper, Textile and

Pharmaceuticals. The highest percentage of the company's shows that Textile companies 37.2%, second largest category is engineering, is 25.6%. The next percentage of the companies is Pharmaceuticals & Food companies, and percentage is 21.8. The lowest part of the sample company is 1.3%, jute. Both are listed manufacturing companies in Bangladesh those are practice the management accounting.

4.6.2 Purposive or Expert Sampling

In case the respondents are very well informed (e.g. CEOs, experts), a small sample is still able to provide high quality, credible information. Expert or purposive sampling has found a broad acceptance in both management and social science research where the study needs to have information on respondents with knowledge in a specific area. The quality of information is the reason in such instances and not the number of respondents. Patton (2002) also points out that purposive sampling has been identified as the best sampling method in situations where the researcher actively targets participants who have extensive expertise that is pertinent to the study phenomenon. Equally, Etikan, Musa, and Alkassim (2016) observe that expert sampling enables researchers to acquire valid and comprehensive information about persons who have acquired certain experience or power, and the sample size is thus of great importance. In organizational research, they can be focused on the CEOs/CFOs/top managers as they are the main decision-makers and in the best position to give sound reports on the strategic practice (Yin, 2014). Thus, small sample size would be acceptable in case expert or purposive sampling is used, as the sample size is relevant, accurate and in-depth, despite the low statistic generalizability.

Nonetheless, purposive or expert sampling was applied in this study to choose respondents with comprehensive knowledge and practical experience to the research situation. Purposive sampling is a non-probability sampling method where the participants are selected based on their skills and capabilities in availing rich and relevant information (Etikan, Musa, and Alkassim, 2016). According to Patton (2002), the method of ensuring that the researcher focuses on cases rich in information is useful especially when it is needed to study and understand a complex organization practice or decision making process. When applied to Management Accounting Practice (MAP), the idea of choosing the CEOs, CFOs or any other decision-maker is suitable as these people are directly engaged in the strategic planning, management of finances as well as performance

measurement (Cooper & Morgan, 2008). Since these respondents are very well-informed, a rather small sample can be used to obtain credible and meaningful information because the emphasis is made on the quality and relevance of the information and not on the statistical generalization (Creswell and Poth, 2018).

Table 4.5: Justifications of Sample from Each Stratum

S.N	Stratum	No. of Company in the Strata	Sample from each stratum	Missing	Closed	Reasons for Missing Survey Company
1	Cement	7	4	3	1	Did not response
2	Ceramics	5	3	2	1	Did not reached
3	Engineering & Steel	33	20	13	4	Data were collected from availability and easy access
4	Jute	3	1	2	1	Did not reached
5	Paper & Printing	4	2	2		Lack of willingness
6	Food, Pharma. & Chemical	49	17	32	2	Data were collected from availability and willingness to participate
7	Tannery & Foot	6	2	4		Did not reached
8	Textile	50	29	21	4	Data were collected from availability and willingness to participate
Total and Sample		**157**	**78**	79	13	

Source: Dhaka Stock Exchange, 2025

Table 4.6: Justifications of Respondents by Top Management

	Years of Experience	Total	

		1-10	11-15	16-20	21-30(+)		Position of the Respondent
Qualifications	BBA	2	1	0	0	3	CEOs/CFOs/top managers
	MBA or ACA or CMA	4	5	11	5	25	CEOs/CFOs/top managers
	MSS	0	0	1	0	1	CEOs/CFOs/top managers
	BSC	1	0	0	0	1	CEOs/CFOs/top managers
	FCA or CA or CFO	11	15	12	10	48	CEOs/CFOs/top managers
Total		18	21	24	15	**78**	

When a small sample is used, it is referred to as appropriate statistical methods (e.g. PLS-SEM). Even small sample sizes will provide valid results in case proper statistical methods are applied. PLS-SEM, one example, is considered as being more appropriate with small samples than covariance-based SEM in that, it aims at maximizing the amount of variance to be explained as opposed to model fit (Hair, Ringle, and Sarstedt, 2011). In the same vein, the bootstrapping methods enable the investigators to determine the stability and reliability of the parameter estimates through repeated resampling of the data making it possible to get the robust results with little data (Efron and Tibshirani, 1993). Furthermore, Bayesian statistical tools are quite forgiving to small samples, as they do utilize prior knowledge and revise the probabilities as new data is received, therefore, making more effective inferences with less information (Gelman et al., 2013). The manufacturing companies listed are 157, and we have use aro population proportion (p=0.11) to get the value of sample size by taking into consideration 5% level of significance. Our sample size in this study was 78 by applying the statistical formula of known population. The participants of this study are well-qualified and at the very least occupy the managerial rank and higher within the company. Thus, it is reasonable to use such sophisticated methods, which rationale the use of

smaller sample sizes, as these techniques contribute to the validity, reliability, and generalizability of results when the amount of data is limited.

4.7 The Method of Data Collection

4.7.1 Questionnaire Development

In a research questionnaire, there are two important types of questions are formed such as open ended question and closed ended questions that were used in this study. In quantitative research, closed ended question plays vital role to complete the research. A closed-ended question in research refers to any question in which members are given options from which to choose an answer (Ivis et al., 1997). However, this study consider open and closed ended questions in the questionnaire. There are five point likert scale "Use a scale of 1 to 5 where1= Never, 2= Rarely, 3= Moderate, 4= Often and 5 =Very Often" to measure the MAP as well as 1 (very low extent) to 5 (very large extent) in terms of measure MAP. To answer a question, respondent should be avoided bias and think rationally for understanding question of a questionnaire.

4.7.2 Data Collection

There are some popular methods or techniques to collect data such as interview, questionnaire survey, observation, probability sampling and other methods to collect data in quantitative research. Besides, quantitative data is greatly arranged for factual and numerical examination, making it conceivable to represent it as diagrams and charts and other advanced econometric analysis. However this study used only questionnaire method for data collection.

A questionnaire is a list of questions that are helps to attain research objective and answering the research question (Balbi & Triunfo, 2012). The questionnaire is developed questions to collect data about the respondent demographical, social, political, cultural, economical and others business related activities. The questionnaire survey is conducted by the researcher. The respondents are responsible to answering the question at their convenient time and situation. The studies are designed in such a way that they legitimize the respondents' way of behaving and trust. Agendas and rating scale questions are as often as possible utilized in quantitative reviews on the grounds that they aid in improving and measuring the demeanor or conduct of the respondents.

4.7.3 Logic behind the Use of Questionnaire Method

In this study, the quantitative data has been collected through questionnaire method. There are two important categories of questionnaire such as structured questionnaire and unstructured questionnaire. Structured questionnaire is a report that comprises of a bunch of normalized inquiries or questions with maintained structured form with a decent plan, which determines the specific phrasing and request of the inquiries, for collecting data from respondents. This is the standard form of data collection and structured questionnaire is most commonly used in qualitative data collection, cause of organized form of questions and options for the respondents.

Whatever, this study follows the structured questionnaire to collect required data. It's a way of collecting data in well organized process at the same time the research has been conducted in a flexible way where the data are manageable. This research implies numbers of question respect to several dimension of contingency theory and interpreted the MAP. The researcher developed a structured questionnaire based on management accounting practice (MAP). Researcher has been provided a questionnaire to the respondents thus respondents are selected by stratified sampling method.

4.8 Methods of Data Analysis

Data analysis methods are divided into two segments: first, descriptive analysis is presented, and second, regression analysis is presented in the data analysis section. However, descriptive statistics help ensure the basic knowledge of survey patterns about the respondents and the company information as well as the nature of management accounting practice in manufacturing industries. The regression analysis section can show the marginal effects of MAP on financial performance and the extent of using MAP to determine financial performance, as well as measure the marginal impact of contingency factors on financial performance based on contingency theory.

4.8.1 Descriptive Analysis

i. **Frequency Table:** This study used frequency table to present the demographic and descriptive statistics. The frequency table is a summary of how many different values are

available. Frequencies provide statistics and graphical displays that are useful for describing a variety of variables. The frequency method is a good place to start for a first look. However, frequency tables demonstrate the circulation of perceptions in view of the choices in variables of this study such as contingent factors and MAP.

ii. **Cross Tabulation:** Cross tabulation is a very strong statistical technique that can help to describe the connection between categorical (nominal or ordinal) variables. It is also known as Cross-tab or Contingency table. Cross tabulation summarizes the relationship between two variables of categorical data. For bivariate analyze we often do Cross tabulation. By this table we can find out whether there is a relationship between two variables or not. It can play a very significant role for categorical data analysis.

iii. **Chi-square Test:** The chi-square test has been used to measure independence of two or more attributes. Mainly, it deals with use Pearson chi-square test. It is to determine the significant difference between observed frequency and expected frequency. It is one of the popular tests for categorical data analysis. Researcher can easily determine whether a relationship exists or not. For this, we have to consider a hypothesis.

The hypothesis of the chi-square test-

H_0 : There is no association between two variables.

The test statistics is defined as,

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where, O_i represents the observed frequency in case i, and E_i is the expected frequency in category i. By using this formula we get our calculated value. From this value we can make our decision. That means, we can conclude whether there is an association between the variables or not. If our calculated value is greater than the tabulated value we reject the null hypothesis. Otherwise we accept our null hypothesis.

4.8.2 Regression Analysis

Regression analysis is a set of statistical methods used to estimate the relationship between dependent and independent variables. Regression analysis allows a researcher to show how a

dependent variable changes as the independent variables change (Draper & Smith, 1998). It can be used to assess the strength of relationships between variables and to forecast future relationships. Endogenous variables, outcome variables, criterion variables, regress and are all examples of dependent variables. Independent variables are also known as exogenous variables, predictor variables, or regressors. However this study was used linear regression to estimate the output.

Multivariate Linear Regression Analysis: When we have one dependent variable and one or more than one independent variables and we want to estimates the relationship between them then the simple linear regression analysis is the best option for us. However, multivariate regression model was used to measure the impact of contingent factors on MAP.

ANOVA Analysis: ANOVA or Analysis of variances enables a researcher to detect if the differences between groups of data are statistically significant or not. We have to see that whether the data follow the assumptions of ANOVA analysis. If the data satisfy the assumptions we will perform ANOVA analysis.

Assumptions of ANOVA Analysis:

i. Homogeneity of Variance – variance among the groups should be approximately equal.
ii. The observations are independent of each other.

Procedures or calculating steep of ANOVA Analysis:

i. Calculating the mean.
ii. Setting up the Null and Alternative hypothesis.
iii. Calculating the Sum of Squares.
iv. Calculating degrees of freedom (df).
v. Calculating Mean Squares.
vi. Calculating the F- statistics.
vii. Looking up the Statistical Table and making conclusion.

Estimation of Chi-square Test in SEM Model

The chi-square test applied measure the association in the independence of two or more attributes. Mainly, it has used Pearson chi-square test. It is to determine the significant difference between observed frequency and expected frequency. It is one of the popular tests for categorical data analysis. Researcher can easily determine whether a relationship exists or not. For this, we have to consider a hypothesis.

The hypothesis of the chi-square test-

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Where, O_i represents the observed frequency in case i, and E_i is the expected frequency in category i. By using this formula we get our calculated value. From this value we can make our decision. That means, we can conclude whether there is a association between the variables or not. If our calculated value is greater than the tabulated value we reject the null hypothesis. Otherwise we accept our null hypothesis.

Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) is one of the most useful multivariate techniques. It is a very powerful technique which is used to measure the measure and analyze the relationship between observed variables and latent variables. Structural equation modeling is combination of multiple regression and factor analysis (Hoyle, 1995).

Steps in performing SEM: There are five logical steps in performing SEM. These are the followings-

1. Model specification
2. Identification
3. Parameter estimation
4. Model evaluation and analysis of model fit evidence
5. Model Modification or Modification Analysis

Structural equation models are very good for research and analysis. It is very helpful for learning different concepts that can influence a latent phenomenon.

Model Specification: The model has implies the latent and observed variable in Structural Equation Model (SEM). The observer variables are commonly known as the independent variable where the observer variables are observed in several measurement scales. On the other hand latent variable is the dependent which is estimated by observed variable through the considerable measurement scale. However, the variables are justified by the following studies such as, Adu-Gyamfi and Chipwere (2020), Gichaaga (2014), Gnawali (2017), Iyibildiren and Karasioğlu (2017), Sharkar et al. (2006) and Shil et al. (2010). The following models have been used to analyzed data as well as estimate the results.

$$\boldsymbol{FP_{it} = \beta_0 + \beta_1 CO_{it} + \beta_2 BUD_{it} + \beta_3 PE_{it} + \beta_4 DM_{it} + \beta_5 SA_{it} + \varepsilon_{it}} \qquad (\mathbf{1})$$

Where; t means time and i is cross section unit,

FP = Financial Performance

CO= Costing

BUD= Budgeting

PE= Performance Evaluation

DM= Information for Decision Making

SA= Strategic Analysis

β_0 = Constant or intercept; β1 to…β5 are regression coefficients or parameter thus are commonly known as observed variables and financial performance is the latent variable.

$\boldsymbol{\varepsilon_{it}}$ = Error term

However, second model has been considering the extent of MAP where age of the company and size of the company, qualification, uses of technology and ownership practice have been evaluated.

The model specified by the equation no 2 where management accounting practice used as latent variable and age of the company and size of the company, qualification, uses of technology and ownership practice of the manufacturing firms are used as observed variable. Moreover, the variables towards the measurement of contingent factors are followed the previous studies such as, Hamdan (2013), Ahmad (2012) and Shil (2017).

$$MAPs_{it} = \beta_0 + \beta_1 ORGS_{it} + \beta_2 AGC_{it} + \beta_3 QUL_{it} + \beta_4 ONP_{it} + \beta_5 TEC_{it} + \varepsilon_{it} \quad (2)$$

Here, Where; t means time and i is cross section unit, ORGS=Size of the company, natural log (Ln) of Total assets, known as market share of the company; AGC= Age of the company or the years of operations; QUL = Qualified accounting personnel influence the extent of MAP; ONP= The ownership participatio and TEC= The uses of information technology in MAP, those factors have been evaluated to determine the extent of MAP in manufacturing companies in Bangladesh. However, β_0 is constant or intercept; β1 to…β5 are regression coefficients for observed variables those have significant impact on determining the company's financial performance and ε_{it} is error term.

Identification: This stage, the research need to test the data considering some reliable statistical criteria which are known as preconditions of estimate structural equation model. Those criteria are KMO test and reliability test (RT) considering the value of Cronbach's alpha. Confirmatory factor analysis (CFA) is a statistical method or technique used to reduce a large number of variables into a smaller number of factors and validate the factor used in SEM analysis. The goal of factor analysis is to reduce and summarize data. Actually, The KMO test allows a researcher to determine whether the sample's distribution of values is adequate for conducting a factor analysis. KMO and Barlett's test can be used together to evaluate all available data. If the KMO value is greater than 0.5 and the significance level for the Bartlett's test is less than 0.05, there is significant correlation in the data. Reliability Test (RT) investigation permits to concentrate on the properties of estimation scales and the things that create the scales. Cronbach's alpha is used to make decision about the factors reliability. The suitable or expected value of Cronbach's alpha is greater that o.70 where if the factors does not maintain this criteria then researcher should modify the latent and observed variables.

Parameter estimation: Estimation of parameter indicates the coefficients estimation which is the value of observed variables. The value of observed variable has been estimated considered by the various scale of an observed variable where each obviation scale takes individual residual. The estimated observed variable has implies the impact on latent variable. The impact of observed variable on latent variable (financial performance) has been analyzed with considering 95% confidence interval and 5% level of significance.

Model evaluation and analysis of model fit evidence: The model fit evidence of SEM analysis has been consider the CMIN statistics, CMIN value represent the Chi squire value. The probability value of the CMIN statistics should be significant and the significance level should be 5% level sometimes it can e accepted in 10% level of significance. CMIN/DF result is also considering significance level 5%. The results of root mean squire residual (RMR) and goodness of fit (GFI) where the value of expected RMR is zero and close to zero. However, the result of goodness of fit (GFI) shows the highest value to explain the fit of model. The used factor explain the dependent factors as much as possible which is determined by value of GFI. The result of PGFI and AGFI has indicated the level consistency in the result estimation. Whoever, the baseline comparison evidence, in this stage, this study considers those criteria like NFI, RFI, IFI, TLI, and CFI. The decision criteria is the get the value of those criteria is close to 0.90 or more than 0.90 because of best fit index to explain the independent variable to dependent variables. However, NFI also called as Delta 1, RFI known as rho1, IFI statistics known as Delta2 and the result of TLI is known as rho2. The FMIN evidence also analyzed in model fit evidence, the FMIN statistics considered those criteria such as F0, LO 90, and HI 90 to determine the model fit evidence. The decision criteria are the get the value of those criteria is close to zero (0) or at the level of significance 10%. Moreover, those criteria should be maintained in a research which is deals with structural equation model.

Model Modification or Modification Analysis: Model modification or modification analysis needed when the estimated model did not fit and did not support to answer the research question. If the model fit evidence did not maintain the acceptable criteria of a model then the study need to modify the model this is known as modification analysis. Modification analysis also applied if the main evidence of model fit is acceptable but the supportive evidence did not acceptable then researcher should modify the model.

4.9 Validity and Reliability

4.9.1 Factor Analysis (FA) and Principle Component Analysis (PCA)

Factor analysis (FA) is a factual procedure used to recognize a generally modest number of basic aspects, or elements, which can be utilized to address connections among interrelated factors. The accentuation in factor examination is the distinguishing proof of hidden "factors" that could clarify the aspects related with information inconstancy (Brown, 2009). The principle objective is to decide the main elements from a bunch of conceivable informative factors, where elements are non-related with one another. Assume we have a bunch of p discernible arbitrary factors $X_1, X_2, \dots X_p$, with means $U_1, U_2, \dots U_p$.

In matrix notation,

$$X-\mu= LF+\varepsilon$$

Where, F defined as factors and L as the loading matrix at that time ε assumes the residual of this estimation.

In matrix notation,

$$X-\mu= LF+\varepsilon$$

Where, F defined as factors and L as the loading matrix at that time ε assumes the residual of this estimation. These component scores are especially helpful in pursuing a choice or whether to perform further investigation including the distinguished variables.

4.9.2 Cronbach's Alpha and Hotelling's T-Squared Test

This study used Cronbach's Alpha and Hotelling's T-Squared test to check the validity and reliability of data. In the field of research and data analysis, the importance of statistical methods like Hotelling's T-Squared Test and Cronbach's Alpha cannot be emphasised. These assessments fulfil different functions, supporting the validity and dependability of research results across a

range of disciplines. Nonetheless, a commonly used internal consistency metric in business and the social sciences is Cronbach's Alpha. There can be confidence that the items are accurately assessing the intended construct if the Cronbach's Alpha value is high (greater than 0.5), which indicates a high degree of internal consistency. This adds to the study's overall robustness by guaranteeing that research findings are supported by reliable and consistent measurements.

4.9.3 KMO and Barlett's Test

The KMO test enables a researcher to measure whether the distribution of values based on the sample is sufficient for conducting a factor analysis. To evaluate all available data together we can use KMO and Barlett's test. There is substantial correlation in the data if a KMO value over 0.5 and a significance level for the Bartlett's test below 0.05.

4.10 Mediation Analysis

Mediation, in the field of statistics, refers to the process where a mediator variable transmits the influence of observed factors onto a latent variable. Put simply, the mediator variable elucidates the mechanism or rationale behind the association between the independent variable and the dependent variable. The rationalised managerial decision (RMD) serves as a mediator variable to assess both the direct and indirect effects among the factors. Rationalised Managerial Decision (RMD) is a management decision-making approach that relies on systematic, logical, and structured examination. This technique guarantees that judgements are made based on unbiased criteria and meticulous assessment of the data and available options. The objective is to optimise efficiency, efficacy, and uniformity in attaining organisational objectives.

Here the observed variables are considered the MAP and the dependent variable is financial performance of the selective manufacturing industries in Bangladesh. Mediation estimate the result of direct, indirect, and total effects of the mediation model where dependent variable is financial performance (FP) and the independent variable is MAP. With the presence of dependent and independent variable, there is a mediating variable entitled on rationalized managerial decision (RMD). Table 4.7 is state the variable details of mediation factor. However the variable rationalized managerial decision (RMD has been developed based on the following factors.

Table 4.7: Structure of Rationalized Managerial Decision (RMD

Statements on Application of **Rationalized Managerial Decision (Mediating Variables)**	**Variable in form**
Costing system provides better insight for benchmarking and for preparation of budget	CS_4
Costing system helps to identify inefficient products, departments and activities	CS_5
Costing system helps to allocate more resources on profitable products	CS_6
Deviations from budget targets are frequently reported and corrective action have taken when deviations are reported	BP_6
Provide information to identify the strategies offering the highest potential for the firm's objectives	PES_1
Provides timely information to assists management in planning, strategic development and implementation	DM_1
Information helps in controlling activities and reduce future uncertainties	DM_2
Have an influence on capital budgeting analysis to decide on new capital budgeting decisions	DM_4
Strategic analysis facilitate in strategic planning	SA_2
Strategic Analysis helps to manage operational risks and to develop innovation and growth strategies	SA_4

4.11 Measure Rationalized Decision as a Mediating Variable and Connection with MAP

To measure the rationalized decision making, as a mediating variable between the Management Accounting Practice (MAP) and the performance of the firm, the conceptualization of rationalization decision making was a systematic, analytical and information-driven process where managers assess alternatives and take strategic or operational decisions. Rationalized decision making in the case of MAP is the degree to which managers can utilize budget information, cost information, variance reports and performance indicators to make evidence-based decisions as opposed to intuitive ones. Classical basis of numerical assessment of rational decisions is based on decision theory proposed by Simon (1978) as such, organizations make better judgments when they are guided by orderly information and analytic analysis. MAP offer just this systematized information and rationalized decision making becomes the process in which this information is converted to better results.

Table 4.8: Justification of Rationalized Decision Making

Segment/Core Variable	Selective Scale	Justification by Literature	Variables are Used
Costing	Costing system provides better insight for benchmarking and for preparation of budget	Zografou et al. (2025)	Decision-Making, MAP
Costing	Costing system helps to identify inefficient products, departments and activities	Mahlhal et al. (2025)	Costing, Rational Decision Making
Costing	Costing system helps to allocate more resources on profitable products		
Budgeting	Deviations from budget targets are frequently reported and corrective action have taken when deviations are reported	Jesus et al. (2025)	Budgeting, Decision Making
Performance Evaluation System	Provide information to identify the strategies offering the highest potential for the firm's objectives	Sutjahyani (2025)	Performance evaluation, Decision Making, MAP
Decision Making	Provides timely information to assists management in planning, strategic development and implementation	Usman et al. (2025)	Rational Decision Making, MAP
Decision Making	Information helps in controlling activities and reduce future uncertainties	Khan et al. (2025)	Rational Decision Making, MAP
Decision Making	Have an influence on capital budgeting analysis to decide on new capital budgeting decisions	Qushtom et al. (2025)	Rational Decision Making, MAP
Strategic Analysis	Strategic analysis facilitates in strategic planning	Alsharari (2024)	Strategic Analysis, MAP, Organizational Change
Strategic Analysis	Strategic Analysis helps to manage operational risks and to develop innovation and growth strategies		

Multi-item Likert-scale tools that have been validated in the literature of decision-making are usually used by researchers to measure this construct. Dean and Sharfman (1996) created one of the most popular scales which measures the extent to which the decisions made by managers are

justified by systematic information collection, methods of analysis and assessment of alternative options. Their scale items like the dependency on the formal analysis, the assessment of the alternatives and the forecast of results of the decision may be adjusted to the manufacturing companies in Bangladesh. Elbanna and Child (2007) elaborate on the method by adopting long-term view, quantitative methods and formal planning, which provides a solid framework of the rationality in strategic decisions. The studies of Chong and Chong (1997) and Naranjo-Gil and Hartmann (2006) in the field of management accounting emphasize the role of the effective utilization of accounting information to increase the level of managerial rationality as according to the authors, MAP have a direct influence on the degree of managerial rationality. This helps in the empirical rationale behind the use of rationalized decision making as a mediating variable: MAP (cost analysis, budgeting, and performance measurement) enhance the quality, relevance, and timeliness of information, which in turn motivates managers to make systematic evaluation rather than informal or intuition-based decision making. Structural equation modeling or process analysis is usually used to test mediation by checking whether MAP mediate performance by the rational decision mechanism. Generally, evidence in literature is overwhelming to show that the account of rationalized decision making as a mediating construct, since it encompasses the translation of accounting information into productive managerial action.

4.11 Conclusion

The methodology of this research implies quantitative approach to answer research questions and achieving research objectives. There are several procedures that have been used to collect data such as questionnaire method. The questionnaire was developed with considering closed ended and open-ended questions and maintains the structured form. Sampling technique for quantitative approach was stratified random sampling. Structural equation model has been formed in this study where confirmative factor analysis, KMO statistics also utilize to determine the factors in SEM analysis. Moreover, the collected data from the listed manufacturing industries in Bangladesh were used to achieve research objectives and answering the research questions.

Chapter 5

Manufacturing Sector in Bangladesh

5.1 Introduction

Bangladesh is the 35th largest economy in the world, in nominal terms, and 29th largest by purchasing power parity. It is classified among the next eleven emerging market middle income economies and a frontier market. Bangladesh is one of the world's fastest growing economies. Per capita GDP and per capita national income are continuing the upward trend. However, Table 5.1 shows the industrial categories based on national industrial policy 2016.

Table 5.1: Categories of Industries

SL	Type of Industry		The amount of investment (Replacement cost and value of fixed assets, excluding land and factory buildings)	Number of employed workers
1	Cottage Industry		Below 10 lakh	Below 16 employees
2	Micro Industry		10 lakh to 75 lakh	16 to 30
3	Small Industry	Manufacturing	75 lakh to 15 crore	31 to 120
		Service	10 lakh to 2 crore	16 to 50
4	Medium Industry	Manufacturing	15 lakh to 50 crore	121 to 300
		Service	2 core to 30 crore	51 to 120
5	Large Industry	Manufacturing	More than 50 crore	More than 300
		Service	More than 30 crore	More than 120

Source: *National Industrial Policy 2016*

Broad industry sector includes 5 sectors

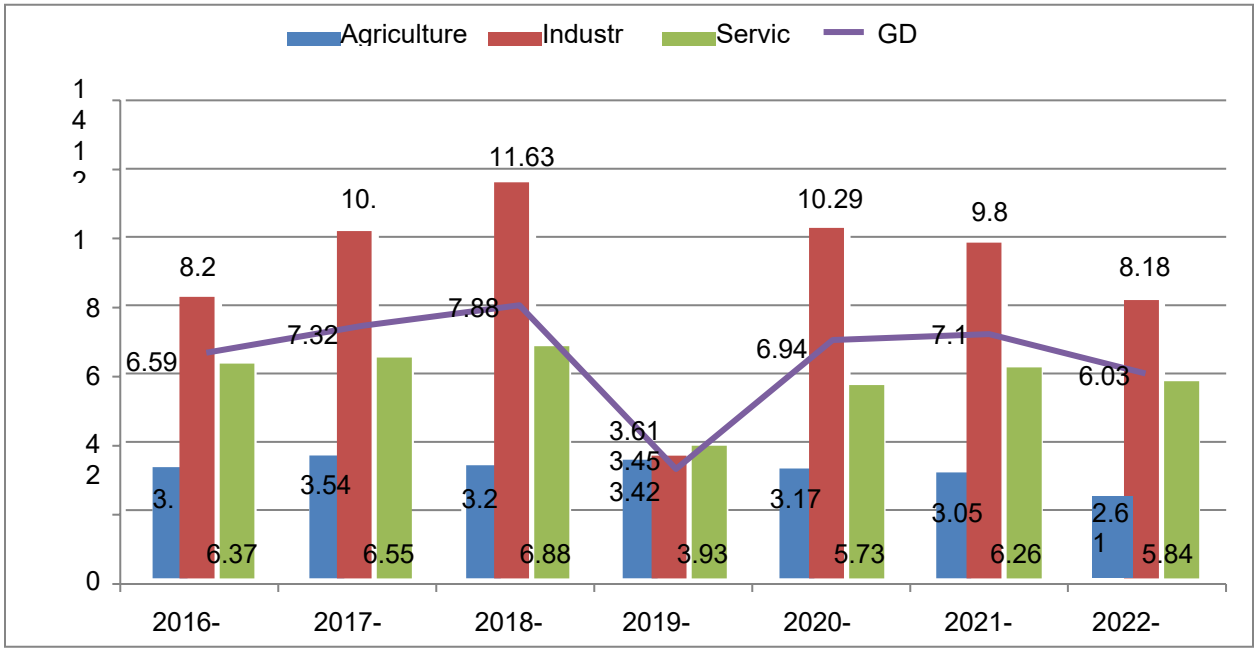
1. Mining and quarrying;
2. Manufacturing;
3. Electricity, gas, and water supply
4. Water supply, sewerage, and waste

5. Construction

- ✓ Contribution of the manufacturing sector is the highest.
- ✓ In FY 2022-23 the contribution of manufacturing sector to GDP is 24.95 percent

Bangladesh is a manufacturing powerhouse in South Asia. Despite its rather small size of 147,000 sq kilometres (similar to Nepal and somewhat smaller than Cambodia), it is the world's eighth most populous country, home to some 160 million people. The country has maintained robust economic growth in the past decade, with GDP growth optimistically projected at around 7% over the next few years.

According to the World Bank, in 2019, per capita Gross Domestic Product (GDP) of Bangladesh (at current US $) was $2,154, which grew to $2,503 in 2021, despite the global economic downturn caused by the Covid-19 pandemic. Likewise, gross national income (GNI) per capita increased to $2,620 in 2021 from $2,250 in 2019. GDP growth increased until 2019 (8.2%), but it declined to 3.5% in 2020 due to Covid-19.



Source: World Bank, 2024

Figure 5.1: Increasing trend of Industrial Contribution

Bangladesh has a well-established manufacturing sector with a contribution of manufacturing value added (MVA) of 20.6% to GDP and MVA per capita of $356 (2015 constant US$) in 2021. Both MVA contribution to GDP and MVA per capita have increased steadily over the last

21 years. While MVA contribution to GDP increased 1.72 times, MVA per capita increased by 4.62 times between 2000 and 2021.

5.2 Growth rate of Manufacturing Sector

Bangladesh is an emerging country with plans to become created by 2041. The nation has seen critical economic development and diminished neediness somewhat recently. Bangladesh has focused on manufacturing improvement since freedom in 1971. Albeit the business is youthful, it is serious areas of strength for moderately. As indicated by the Global Work Association, the RMG area rules the business with in excess of 5,000 plants across the country.

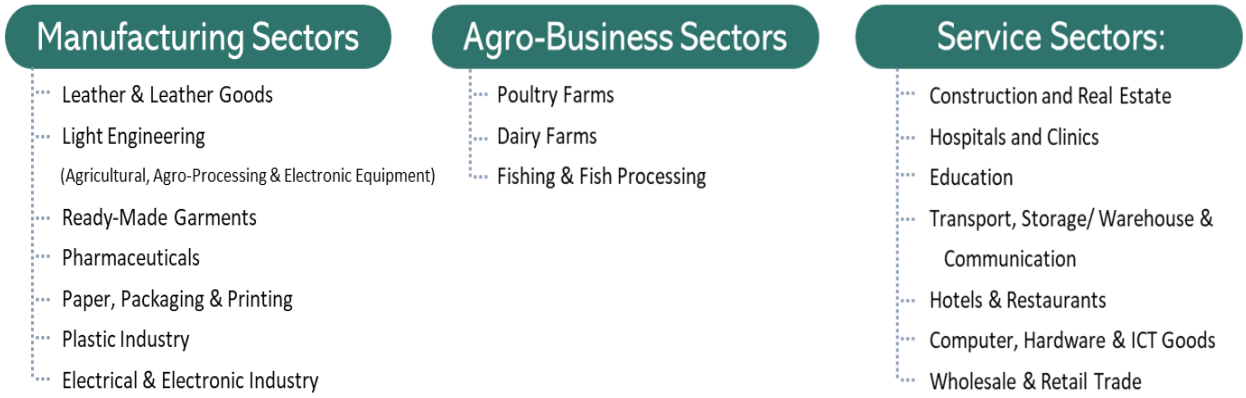
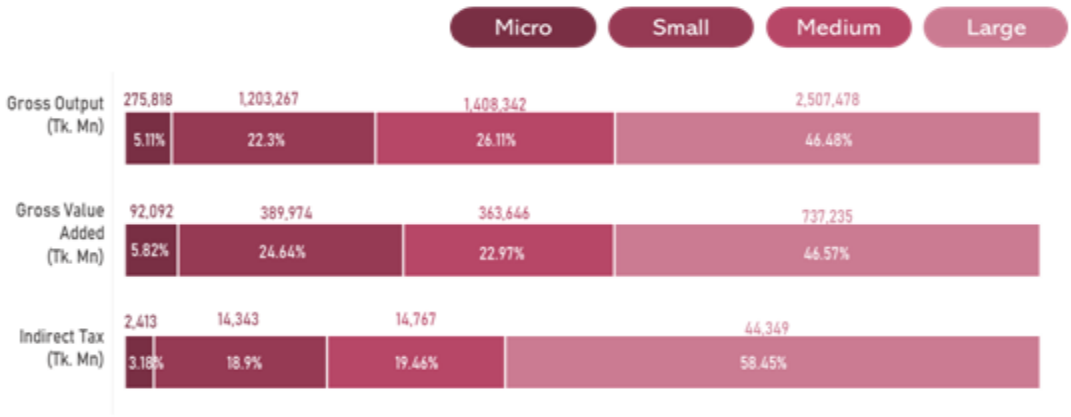


Figure 5.2: Sub-sectors of the Small and Medium Enterprises (SMEs)

The present moment, it's elusive a maker in Bangladesh for an item beyond the piece of clothing/material industry however that is evolving. The public authority is pushing for manufacturing variety, zeroing in for the most part on the cowhide business. Bangladesh's gigantic inventory of animals gives them an unmistakable benefit. They produce 50 million head of domesticated animals a year, so obtaining is more straightforward and more affordable. The nation is additionally focusing on expanded manufacturing in the car, agribusiness and drugs areas.

The expansion in manufacturing is the way in to the subject of the legitimacy of development rate. The manufacturing area is assessed to increment by 13% and this expanded rate is questioned by numerous onlookers. The record of huge and medium manufacturing has been developing at 11% per annum throughout the course of recent years; result of enormous and medium enterprises for the initial four months of the economic year expanded more than 20% over the earlier year. The imports of capital merchandise that are connected to 60 percent of manufacturing have been

expanding. Capital merchandise for manufacturing expanded at around 19% per annum from 2012-13 to 2015-16 while the year 2016-17 saw 24 percent expansion over the earlier year. In this manner there have been areas of strength for an of capital merchandise for assembling. Accessibility of power for the manufacturing area has worked impressively throughout recent years with exceptional, profoundly dependable electrical cables to key modern regions. This information supports an expanded development rate throughout the last years.



Source: *Bangladesh Bank, 2024*

Figure 5.3: Contributions of Different Industrial Categories to the Economy of Bangladesh

The 2017-2018 Worldwide Seriousness Report positioned Bangladesh 109th in by and large nature of foundation, and 99th in transportation. The public authority is very much aware of how unfortunate foundation will impede their manufacturing industry and they're working effectively towards enhancements. The public authority intends to update the streets from manufacturing plant urban communities to ports, slicing travel time down the middle and diminishing transportation costs. They're likewise making progress toward cross country power access in 2021.

A significant analysis is the irregularity between the development of work in manufacturing and the expansion in yield. A couple of focuses in such manner are: the piece of clothing area is moving quickly towards more noteworthy capital force and business per piece of clothing is falling. The area can increment creation through additional time by something like 10% with practically no expansion in the quantity of laborers and capital gear. Simultaneously, the significant ventures occurring in the sewing business is going through robotization - in this manner pointedly

decreasing work necessities. Materials and drugs are two areas with significant significance for manufacturing that are capital-concentrated. The efficiency expansions in the article of clothing area are very quick. At long last, the greater part of the manufacturing is delivered by the enormous and medium-sized industrial facilities. These give the conventional positions in assembling. This appears to cover under 20% of complete work in industry. Thus, changes in the complete manufacturing workforce are not exact proportions of changes in yield.

5.3 An overview of Manufacturing Sector in Bangladesh

5.3.1 The Contribution of Manufacturing Sector in Bangladesh Economy

There is bountiful observational proof to show that the manufacturing area assumes a significant part in financial development universally, especially when nations are at a somewhat lower-pay level. Fabricating offers the chance of more elevated levels of efficiency, more fast efficiency development and more prominent mechanical change than horticulture, or under a specific pay level, in many pieces of administrations areas. Furthermore, it can make occupations that offer higher wages because of a more significant level of efficiency. Subsequently, there is generally a relationship between the development of an economy and the size and development of its manufacturing area. This relationship is regularly more grounded in low to bring down center pay economies than in center to big league salary economies, since the efficiency and business impacts of manufacturing comparative with different areas are supposed to be higher at lower pay levels.

The manufacturing area assumes a significant part in world exchange. As indicated by the WTO, 80% of world exchange among areas is stock exchange of made products.

The portion of Manufacturing Value Added (MVA) in Gross domestic product, too according to capita MVA, can be utilized to think about the significance of the manufacturing area among nations. The two markers are significant measures to dissect development improving underlying change inside an economy. Furthermore, producing sends out per capita can be utilized as the principal sign of the global intensity of the nation's manufacturing area. Bangladesh's manufacturing area assumes a moderate part in the economy as far as both the MVA as a level of Gross domestic product, as well as MVA per capita. Its MVA as level of Gross domestic product remained at 20.6% in 2021. This expanded by around 8.6 rate focuses from 2000.

More than a 21-year time span, normal MVA as a level of Gross domestic product was seen as higher contrasted with India (16.6%), Vietnam (18%) and Indonesia (20.1%). Yet, its MVA as a level of Gross domestic product was still lower than Malaysia (22.7%), Thailand (25.8%) and

China (28.1%). On account of MVA per capita, Bangladesh arrived at the three-digit figures in 2007 and consistently kept a three-digit figure until 2021.

In 2021, Bangladesh's per capita MVA (steady 2015 USD) stood most noteworthy at $356. This is higher than India ($331), however lower than Indonesia ($776), Malaysia ($2,459), Thailand ($1,623), China ($3,076) and Vietnam ($487). Bangladesh's per capita MVA is even beneath the territorial normal of creating Asia ($1,572).

This plainly mirrors the power of the manufacturing area as somewhat low and demonstrates there is space for development and increment the commitment from such a significant area. Additionally, producing sends out per capita of Bangladesh in 2018, was $198, which is marginally lower than India ($208), however remarkably lower than Vietnam ($2,210), Thailand ($3,230), China ($1,690), Indonesia ($464) and Malaysia ($6,700).

Fabricating exercises have developed from 5.5% of the Gross domestic product to around 22% in 2022, to increment further in the eighth five-year plan. The extension of manufacturing exercises over the course of the past ten years is driven principally by the nation's product situated RMG area, presently the world's second-biggest exporter. The RMG area utilizes almost 4.2 million individuals, of whom practically 80% are ladies, for the most part in low-gifted jobs. In 2022, the RMG area represented 12% of the Gross domestic product and 84% of commodities. The Public Modern Strategy (2022-2027) has declared its aggressive objective of accomplishing a 40% commitment to the Gross domestic product.

Directing a complete evaluation of the modern area's presentation is currently pivotal. To confront post-LDC challenges, Bangladesh should broaden its manufacturing base and draw in joint and unfamiliar interest in foreign direct investment (FDI). A new report by ADB, upheld by OECD (Association for Financial Co-activity and Improvement), demonstrated that around 75% of Bangladesh's products at present go to nations offering obligation free access.

The deficiency of such inclinations is supposed to lessen trade profit by more than 14%, especially influencing the RMG area. The concentrate additionally featured that green field FDI in Bangladesh is exceptionally packed in the oil and gas area, making somewhat scarcely any immediate positions. A more enhanced arrangement of FDI projects in additional work escalated exercises could assist with tending to Bangladesh's work creation pressure, with around 2,000,000 individuals entering the work market yearly.

Nations like India, Cambodia, Vietnam, Myanmar, Indonesia, and even Sri Lanka have performed better in making position in new areas like light designing and other imaginative enterprises. FDI can be a fundamental driver of advancement and abilities improvement. Taking into account modern methodologies and upgrading strategies of respective accomplice nations, Bangladesh needs to draw in greener FDI, particularly in the sustainable power area. The portion of FDI in green advances between 2013-2022 is a lot higher in Cambodia, Vietnam, India, Indonesia, and Myanmar, going from 14%-18%, while it is just 6% in Bangladesh.

During 2013-2012, FDI in coal, oil, and gas surpassed 18%. It is under 2% in environmentally friendly power, essentially sun based power. Bangladesh requires a two dimensional strategy approach, expanding interest in environmentally friendly power other than sunlight based power and differentiating FDI from coal, oil, and gas to other manufacturing areas.

5.3.2 Employment Opportunity in Manufacturing Sector

The manufacturing area at present contributes 17% of the worth added to the country's Gross domestic product as well as 90% of commodities. Nonetheless, as is notable, low-gifted work escalated fragment in the manufacturing area actually has a huge impact in the economic prosperity of Bangladesh. Although 15% of the country's business comes from this area, it has made critical commitment towards carrying ladies into the workforce and is creating business valuable open doors in an economy where huge portions of laborers stay independently employed. Truth be told, close to half of metropolitan working ladies underneath the age of 25 years are taken part in the manufacturing area that produces powerful multiplier impacts as around two immediate and actuated positions are made for each immediate work in the area. These are a portion of the fascinating discoveries contained in the country private-area demonstrative review named 'Making Markets in Bangladesh: Releasing the Confidential Area to Support Improvement Achievement's distributed as of late by the World Bank Gathering (WBG).

Table 5.2: Investment, Production and Employment of BSCIC Industrial Estates

1.	**Total no. of Industrial Estates**	**80**
2.	Total no. of Industrial plots	11922
3.	Total no. of plots allotted (Up to February 2023)	10607
4.	Total no. of Industrial units allotted (Up to February 2023)	5998
5.	Total no. of units under production (Up to February 2023)	4769

6.	No. of export oriented units (Up to June 2022)	962
7.	Total Investment (Up to June 2022)	Tk. 43259.77 crore
8.	Employment (Up to June 2022)	8.25 lakh Persons
9.	Total sales price of the products produced (FY 2021-2022)	Tk. 76410.16 crore
10.	Total sales price of exported products (FY 2021-2022)	Tk. 46293.37 crore

Source: MoI, BSCIC, 2024

Official measurements of 2019 demonstrate that with less than 10 specialists, microenterprises represent 90% of all manufacturing undertakings in the country. Among these substances, enormous firms having more than 250 specialists have a portion of simply 6.5 percent concerning numbers, with material and piece of clothing plants representing 85% however contributing 68.5 percent occupations. Conversely, despite the fact that processing plants having under 100 laborers have a portion of 87% among all manufacturing foundations, their commitment towards occupations is just 23.5 percent. Inside the manufacturing area, the piece of clothing and material processing plants rule with a portion of 40% among non-microenterprise elements; however they contribute half of the manufacturing esteem added and 85 percent of commodities. The food-and refreshment producing foundations have a portion of 20.5 percent in the aggregate, yet create simply 14% to the worth added. Then again, minerals and metal foundations have a portion of 17% yet contribute around 22% to the manufacturing esteem added.

Table 5.3: Yearly Investment, Production and Employment of BSCIC Industrial Estates

Financial Year	Investment (Cumulative) (Taka in Crore)	Annual production (Taka in Crore)	Employment (from the beginning) (In Lakh)
2012-13	17411	36097	5.04
2013-14	18897	42509	5.26
2014-15	19380	43858	5.50
2015-16	20178	45879	5.63
2016-17	20178	55262	5.64
2017-18	25418	59107	5.79
2018-19	27689	50682	8.24
2019-20	39217	136998	8.25
2020-21	41217	60945	8.25
2021-22	43260	76410	8.25
2022-23*	43260	-	-

Source: MOI, BSCIC. (2023)

The WBG report calls attention to that manufacturing in Bangladesh is still of essential nature, and useful abilities have not grown altogether regardless of the progress of the RMG subsector in late many years. It suggests that the area including RMG stays zeroed in on low-efficiency exercises including restricted mechanical intricacies that require just fundamental abilities. Thusly, the nearby RMG field has stayed adhered to the lower rungs of worldwide item quality stepping stool over the earlier 10 years. Not obviously, annualized fabricating area efficiency development in Bangladesh during 2010-16 was just 2.2 percent on a normal, which restricts the speed of compensation development accordingly easing back the speed of neediness lightening too. The continuous Fourth Modern Transformation presents a few valuable open doors for the Bangladesh producing area notwithstanding developing difficulties to the country's reliance on low work costs. The overall patterns and utilization of extra assistance inputs in manufacturing will without a doubt contract the general job of untalented manufacturing work remembering for RMG production lines. Albeit the last option is viewed as least defenseless to computerization, a few late mechanical changes are now affecting on the work use in RMG. That thus might seriously jeopardize the work of low-talented work as well as seriousness of neighborhood producers who have customarily depended on low specialists' wages and were feeble in the reception of new innovation. Nonetheless, convenient reception of modern, enlightening, and conditional innovations also as further developed administrative practice can absolutely help the nearby makers to move to more intricate and higher worth added creation that can uphold higher wages.

Table 5.4: RMG Progress in Bangladesh (Value in Million USD (Fiscal Year Basis))

Year	Export of RMG	Total Export of Bangladesh	% of RMG's to Total Export
2015-16	28094.16	34257.18	82.01
2016-17	28149.84	34655.90	81.23
2017-18	30614.76	36668.17	83.49
2018-19	34133.27	40535.04	84.21
2019-20	27949.19	33674.09	83.00
2020-21	31456.73	38758.31	81.16
2021-22	42613.15	52082.66	81.82
2022-23	46991.61	55558.77	84.58

Source: *BGMEA, 2024*

The case for differentiating producing products of Bangladesh has been supported by the new reality that the Coronavirus pandemic could have contributed towards speed increase of the Fourth Modern Upheaval. The pandemic has likewise exposed the weakness of Bangladeshi makers to over fixation in trades as to the two items and markets, as lockdowns in Europe and America brought about a breakdown popular across supply chains. The WBG report predicts that the pandemic might be speeding up two basic patterns in the manufacturing area that would have significant ramifications for Bangladesh. Numerous makers, right off the bat, may take on more up to date advancements at a quicker pace for limiting dangers to work and answer quickly to rising buyer requests in web-based stages. As an outcome, the effect of the fourth industrial revolution might be felt sooner in Bangladesh than what could have happened in any case. Also, the store network methodologies across the world are probably going to go through changes as lead purchasers are reevaluating the equilibrium of dangers against related costs, which might bring about rebuilding of existing worldwide stock chains. Both these patterns might present open doors and dangers for the Bangladeshi producers remembering those for RMG.

There are a few cross-removing needs as pointed by the WBG report, however expansion of manufacturing area requires specific area explicit mediations. For instance, subsectors adding higher worth ought to be empowered. The normal regions that require improvement incorporate the making of an empowering climate for FDI motivator plans, consistence with ecological, work and social principles, exchange coordinated operations, solid energy supply, and overhauling workforce abilities. Temporarily, the making of an empowering climate for FDI is expected to bring expertise and extend admittance to the commodity market. In addition, admittance to long haul money ought to be improved by facilitating endorsements for unfamiliar business borrowings.

In the medium term, the motivating force system ought to be changed, which could incorporate getting rid of exorbitant exchange security as it puts the development of areas not covered by the current plans down. Consistence with ecological and social norms ought to be fortified by reinforcing administrative implementation and putting resources into specialized framework like research centers and testing offices. The exchange coordinated factors should be improved for

abridging the expense of transportation and capacity. Admittance to dependable energy can be extended by additional fortifying the availability framework. What's more, abilities of laborers can be improved by recognizing the holes, growing specialized and professional schooling, and by reinforcing the coordinated effort among enterprises and the scholarly field including colleges.

5.3.3 The role of the government of Bangladesh for Manufacturing Sector

Government Keen to Diversify Industries

Aside from textile and RMG, Bangladesh is attempting to give a more grounded push in the improvement of different businesses to enhance its manufacturing portfolio. Need areas incorporate endlessly calfskin products, auto, agribusiness and drugs. Notwithstanding its work advantage, Bangladesh's calfskin handling and cowhide products manufacturing might profit from the country's neighborhood cowhide supply. Bangladesh creates in excess of 50 million head of domesticated animals per year. Calfskin is the biggest result of domesticated animals and this consistent inventory has assisted help a cowhide industry with yearly commodities of around US$1 billion. During the Eid al Adha (Celebration of Penance) held in September every year, more than 1.5 million animals are butchered in only multi week. Aside from got done and semi completed calfskins, Bangladesh's cowhide sends out are step by step moving to higher esteemed added things, like cowhide products and footwear. Like their partners in the RMG area, Hong Kong organizations participated in calfskin products and attire adornments might think about manufacturing movement or expansion in Bangladesh. Producer can source cowhide straightforwardly and all the more efficiently in the nation as well as leading product handling there to save transportation costs.

Economic Zones Development Accelerated

Intended to further promote manufacturing, the *Bangladesh Economic Zones Authority (BEZA)* is tasked with developing economic zones (EZs) throughout the country for industry development. Currently, 56 government-owned EZs and 10 private owned EZs are listed.

BEZA intends to foster up to 100 EZs with a complete area of 30,000 hectares (or 300 sqkm, around one fourth the size of Hong Kong) all through the country by 2025 for the utilization of both nearby and unfamiliar financial backers. BEZA drives the improvement of destinations, particularly in adjusting foundation arrangement, while empowering (PPP) for EZ advancement.

Table 5.5: Zone-wise Statistics of Industries Investment Export and Employment of EPZs

Name of EPZs	*Number of Industry*		*Investment (US$ in M)*	*Export (US$ in M)*	*Employment (No.)*
	In Operation	*Under Implementation*			
Chattogram EPZ	150	10	1999.45	39741.18	173440
Dhaka EPZ	89	6	1718.83	33826.67	76147
Adamjee EPZ	48	12	709.88	7501.09	58414
Cumilla EPZ	48	5	548.12	5298.34	44048
Karnaphuli EPZ	42	6	712.20	10132.05	73812
Ishwardi EPZ	21	20	233.97	1461.57	17045
Mongla EPZ	31	10	145.70	1070.73	11527
Uttara EPZ	23	6	226.78	2201.08	31871
BEPZA EPZ	0	18	1.30	0.00	0.00
Total=	452	93	6296.24	101232.71	486304

Source: *BEPZA. (2023)*

Table 5.6: Product-wise Number of Enterprises, Investment & Employment

Sl	Product	Enterprise (Nos.)	Investment (Million US$)	Employment (Nos.)
1	Garments	140	2642.13	318409
2	Garment Accessories	85	819.84	15448
3	Textile	31	783.52	22454
4	Knitting & other Textile Ltd.	24	364.89	16171
5	Footwear & Leather goods	23	357.28	34499
6	Electronics & Electrical goods	16	173.00	3843
7	Tent	14	177.50	19332
8	Plastic goods	14	105.58	4217
9	Service Oriented Industries	11	58.06	1140
10	Metal Products	10	43.47	1545
11	Terry towel	8	29.10	1964
12	Chemical & Fertilizer	4	14.22	104
13	Caps	5	72.27	7014
14	Jute Products	4	33.62	819
15	Agro Products	4	2.46	12
16	Luggage/Bag	5	31.67	5577
17	Paper Products	3	5.11	195
18	Furniture	2	34.55	1058
19	Power Industry	2	159.11	188
20	Toys	2	59.37	4769
21	Yarn	2	12.76	371
22	Fishing Reel & Golf Equipment	1	44.84	1314
23	Miscellaneous	42	270.33	25862
	Gr. Total	452	6296.24	486304

Source: *BEPZA. (2023)*

Bangladesh keeps on confronting the desperate requirement for moves up to its framework and utilities to work with additional modern turn of events. Indeed, even in Dhaka, there are not many all around cleared four path expressways. Traffic in the city is hugely blocked. A broad organization of freeways and expressways are expected to associate the EZs being worked on with ocean ports.

A Bright Digital Future

The public authority in Bangladesh is striving to increase quality expectations and carry more business to their manufacturing industry. In February of 2019, the public authority embraced the colossal and game-changing venture of making a computerized catalog of their entire piece of clothing production lines. The venture appears as a guide (which can be seen as here). Theo's country will probably have all plants in Bangladesh digitized by 2021.The registry incorporates key data for every production line, including: area, contact data, items fabricated, number of laborers, brands and specialists, enrollments, examination posting, WPC status, and commodity nations.

5.3.4 Opportunities and Challenges for Manufacturing Sector

Strengths of the manufacturing sectors state that, Bangladesh primarily sends out readymade pieces of clothing that have a lower cost than gadgets, auto, execution wear, travel merchandise and other higher esteemed trades from for example Thailand, Malaysia, China and Vietnam. Clothing, materials, endlessly calfskin products, food and refreshments contributed 97% of complete modern commodity in Bangladesh in 2020; while 18 other industry areas contributed just 3% in all out trade. Then again, these four enterprises contributed 22.3%, 34.6%, 9.7%, 15.5%, 26.9% and 14.8% of absolute products in India, Indonesia, Malaysia, Thailand, Vietnam and China, separately.

It is plainly apparent that Bangladeshi commodity bin is primarily reliant upon few things contrasted with different nations in South Asia and Southeast Asia. This demonstrates the way that Bangladesh can gain from different nations and expect to increment and enhance its manufacturing sends out.

Industrialization is just useful when it is comprehensive and economical with the goal that it adds to the economy, to the prosperity of individuals and networks, and insurance of the climate and environment. The making of work valuable open doors in the conventional economy is an essential for comprehensive modern turn of events.

Nonetheless, essentially bringing more individuals into formal business is definitely not an adequate condition for comprehensive turn of events. Comprehensiveness likewise suggests that all individuals, regardless of their orientation, religion and capacities, have equivalent admittance to occupations and ladies and men are similarly addressed in all areas and at all levels.

Female work in the manufacturing area in Bangladesh, India, Indonesia, Malaysia, Thailand, and China was 15%, 13%, 16%, 17%, 18% and 28% separately. In 2019, the portion of manufacturing work as an extent of complete work in Bangladesh was 14.8%, which was higher than India (12.1%) and Indonesia (14.4%), yet lower than Vietnam (18.4%), Malaysia (16.8%), Thailand (16.3%), and China (19.5%).

However, the goals state that, the government has targeted to increase manufacturing employment to 22% by 2025 and 25% by 2030.Recently published Survey of Manufacturing Industry (SMI)-2019 showed that in Bangladesh, jobs declined by 1.23% between 2011 and 2018. The somewhat low degree of manufacturing work principal originates from the low degree of manufacturing

exercises. Understanding the construction of the manufacturing area can give helpful bits of knowledge into why work in the manufacturing area is still lower in Bangladesh than Vietnam, Thailand, Malaysia and China.

Unido has been estimating producing execution in 131 economies by utilizing the SDG-9 industry record. The SDG-9 industry record addresses an exhaustive yet direct way to deal with survey the degree of nations' degree of industrialization. Upsides of the SDG-9 industry file are standardized between 0 (base) and 1 (top). The SDG-9 Industry File's scores show the aspects in which nations lead or linger behind different economies.

Bangladesh positioned 89th in the SDG-9 industry file, well behind Sri Lanka (74th) and India (81st), only possibly in front of Pakistan (92nd). South Asia is miles behind East and South-East Asia with China sixteenth, Malaysia nineteenth, Thailand 24th, Indonesia 44th and Vietnam 64th. Bangladesh's manufacturing area depends, generally, on the clothing area. Around 84% of product procuring is created from the clothing area. Enhancing away to other possible areas, for example, calfskin, food handling, jute, light designing and plastic, is in this way, not just an essential way for reinforcing the manufacturing area concerning MVA, per capita commodity and seriousness, yet could likewise increment work in assembling. This would further develop comprehensiveness by fortifying a working class utilized in the manufacturing area. No nation has at any point finished such an undertaking, of making every one of their plants accessible and carefully associated. On the off chance that they are effective in their objective, Bangladesh could turn into a worldwide manufacturing pioneer which is certainly something you ought to remember.

Not at all like different South East Asian had elective creation bases, like Cambodia and Vietnam, where unfamiliar contributed organizations rule the manufacturing business, has Bangladesh’s RMG area had an impressive degree of nearby organization investment. Bangladeshi RMG producers are additionally lucid and cutthroat administrators, with rich involvement with working with worldwide purchasers.

5.4 Contribution towards Economic Growth

Bangladesh, a country once inseparable from destitution and underdevelopment, has arisen as quite possibly of the quickest developing economy in the world. A critical calculates this change is the

vigorous development of its modern area. From materials and pieces of clothing (RMG) to drugs and shipbuilding, the industrial sector in Bangladesh plays had a critical impact in driving the country's economic development, decreasing neediness, and working on expectations for everyday comforts. This article investigates the diverse commitments of the industrial sector to Bangladesh's economic turn of events, looking at its verifiable setting, present status, and future possibilities. The industrial sector in Bangladesh has developed significantly since the nation acquired freedom in 1971. At first, the economy was transcendently agrarian, with farming representing more than half of Gross domestic product. Nonetheless, perceiving the requirement for expansion and modernization, progressive states executed arrangements to advance industrialization. The early spotlight was on import-replacement ventures, however after some time, the accentuation moved toward trade arranged industrialization. The Instant Piece of clothing (RMG) industry, which started in the last part of the 1970s, denoted the start of a critical change. It immediately turned into the foundation of Bangladesh's modern area, driven by ideal work costs, government motivators, and worldwide interest. The progress of the RMG business set up for more extensive modern development, drawing in FDI and making a great many positions.

The modern area's commitment to Bangladesh's Gross domestic product has expanded essentially throughout recent many years. Starting around 2023, the industrial sector represented roughly 35% of the nation's Gross domestic product, up from only 9% in 1972. This development has been driven by a mix of variables, including expanded domestic and foreign venture, mechanical progressions, and further developed framework. One of the main commitments of the industrial sector has been work creation. The RMG business alone utilizes huge numbers of people, with ladies making up most of the labor force. This has added to destitution decrease as well as engaged ladies financially, prompting more extensive social changes. The industrial sector overall gives work to millions additional in different sub-areas, including materials, drugs, calfskin, and gadgets. Bangladesh's modern area, especially the RMG business, has been the main thrust behind the nation's commodity development. The nation is the second-biggest exporter of pieces of clothing on the planet, with the area representing more than 80% of absolute products. This has produced significant unfamiliar trade profit, which are critical for supporting imports of capital products and unrefined components, as well concerning keeping up with the country's unfamiliar trade holds. Notwithstanding pieces of clothing, other modern areas, like drugs, cowhide, and shipbuilding, have additionally made critical commitments to send out income. The drug business, for example,

has turned into a main exporter of conventional meds to north of 150 nations, because of the business' adherence to worldwide quality principles and the improvement of a talented labor force. The industrial sector in Bangladesh has seen critical mechanical headways, especially as of late. The reception of present day advancements, mechanization, and digitalization has prompted efficiency gains, cost decreases, and upgrades in item quality. These headways have permitted Bangladeshi businesses to stay cutthroat in the worldwide market, even despite rising work costs and expanding ecological guidelines. The public authority has likewise assumed an essential part in advancing mechanical development through different drives, like the foundation of Special Economic Zones (SEZs) and Export Processing Zones (EPZs). These zones offer a favorable climate for ventures to embrace cutting edge innovations and draw in FDI, further supporting efficiency and modern development.

Table 5.7: Industrial Sector's Growth Rate of GDP (Base Year: FY16)

Industry	**Fiscal Year 2019/20**	**Fiscal Year 2020/21**	**Fiscal Year 2021/22**
	11.63	**3.61**	**10.29**
a) Mining and quarrying	11.31	3.16	6.49
b) Manufacturing	12.33	1.68	11.59
i) Large industry	12.79	0.41	10.61
ii) Small, medium and micro industry	10.61	2.69	13.89
iii) Cottage industry	14.17	3.67	10.27
c) Electricity, gas, steam and air conditioning supply	8.24	0.67	9.54
d) Water supply, sewerage, and waste	6.31	2.18	6.65
e) Construction	10.47	9.13	8.08

Source: BBS, 2023

Table 5.8: Volume of Manufacturing Sectors (Crore Tk)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23*
Large Industry	221152	237826	275676	311858	318033	357357	422896	471697
Small, Medium and Micro Industry	129108	146724	173858	198066	208696	248999	273587	317583
Cottage Industry	72127	82056	99490	116014	126335	143302	167954	193833

Source: BBS, 2023

The development of Bangladesh's industrial sector has been upheld by a progression of government strategies and impetuses. The public authority has executed different modern arrangements pointed toward advancing speculation, further developing foundation, and improving the business climate. These arrangements have included charge motivating forces, appropriations, and the arrangement of reasonable land and utilities in modern zones. Furthermore, the public authority has zeroed in on working on the simplicity of carrying on with work in Bangladesh. Changes in regions, for example, business enlistment, property privileges, and agreement implementation have drawn in both homegrown and unfamiliar financial backers. The public authority's accentuation on framework improvement, especially in energy and transportation, has likewise assumed a vital part in supporting modern development. Notwithstanding its great development, the industrial sector in Bangladesh faces a few difficulties that could impede its future turn of events. One of the main difficulties is the absence of sufficient framework, especially in energy and transportation. Successive blackouts and deficient transportation organizations can disturb creation and inflate costs, lessening the area's seriousness. Another test is the requirement for broadening inside the modern area. The weighty dependence on the RMG business makes the economy powerless against outer shocks, like changes in

worldwide interest or exchange approaches. While different areas, like drugs and shipbuilding, have shown guarantee, they still can't seem to arrive at the scale and significance of the RMG business. Natural manageability is another major problem. Quick industrialization has prompted ecological corruption, including air and water contamination. There is an earnest requirement for ventures to take on additional manageable practice and for the public authority to stringently uphold natural guidelines more.

5.5 Conclusion

The public authorities proceeded with center around industrialization, joined with the nations huge and developing workforce gives a strong groundwork to future development. The improvement of new modern areas, like hardware and data innovation, offers potential open doors for additional expansion and worth option. Bangladesh's essential area, with closeness to significant business sectors in Asia, Europe, and the Center East, additionally offers critical potential for growing modern commodities. The public authority's endeavors to further develop network through framework improvement, for example, the Padma Bridge and the extension of ports, will additionally upgrade the country's appeal as a venture objective. The industrial sector specially the manufacturing sector has been a critical driver of Bangladesh's economic development, changing the country from an agrarian economy to an arising supremacy. Its commitments to Gross domestic product, business, trade development, and mechanical headway have been significant, assisting with diminishing destitution and work on expectations for everyday comforts. While challenges stay, the area's future possibilities are promising, gave that the public authority and confidential area keep on tending to framework needs, expand the modern base, and advance economical practice. As Bangladesh proceeds with its excursion towards turning into a center pay country, the industrial sector will without a doubt assume an undeniably significant part in forming the country's economic predetermination.

Chapter 6

Extent of the Use of Management Accounting Practice

6.1 Background

According to the *"International Management Accounting Practice Statement (IMAP)"* management accounting concepts issued by the International Federations of Accountants in 1998 (IFAC, 2002), In dynamic and competitive contexts, management accounting refers to the part of the management process that is focused on how organizational resources are used. It describes managerial processes and technologies that are aimed at enhancing the value of organizations by achieving the effective use of resources. Langfield-Smith et al. (2006) further elaborated management accounting as "the process and techniques that focus on the effective and efficient use of organizational resources to support managers in their tasks of enhancing both customer value and shareholder value." As a summary, we can say a management accounting system includes a broader range of information systems maintained by an organization to provide relevant information to the manager for managing resources and creating value. It's crucial to make sure that the information generated is of high quality in order to manage a variety of resources and information. According to economic models of decision-making, the only way to guarantee improved resource allocation in cases of uncertainty is to provide better-quality information (Baines & Langfield-Smith, 2003). According to Chenhall (2003), the provision of higher-quality information can also ensure that top management makes wise decisions, increasing the likelihood of successful organizational performance. Gupta (1987) went on to say that an organization's strategic information-processing capacity is what's needed to produce wise and timely selections and, eventually, attain its optimum efficiency. Organizations need reliable management accounting systems because they provide managers with current, pertinent information that helps them make wise business decisions. In this regard, it is necessary to choose the appropriate management accounting practice to guide the systems in order to achieve their solidity. According to IFAC (2002), management accounting practice (MAP) alludes to the related set of MA viewpoints, directions to activities and organizations in the administration process, work advances utilized, and practical plans utilized in the administration cycle of associations to guarantee progressing esteem creation through the proficient and compelling utilization of assets. However this chapter

investigated the research question entitled on “What is the extent of the use of MAP by Manufacturing Companies in Bangladesh?”

Different theories were involved that in the MA literature to give a superior comprehension of MAP, how associations use them and the impact of such use. Among them, possibility hypothesis used to make sense of the utilization of MAP. The possibility hypothesis of associations predicts that the connection between the attributes of an association and authoritative execution is reliant upon explicit contingent variables. According to (Johnson & Kaplan, 1987; Govindarajan, 1988) has used possibility hypothesis on the premise that the MAP and frameworks can't be generally suitable, and cycles and the MA data frameworks should be concocted to help key needs in associations. Otley (1992) remarked that association's business methodology assume a supporting part for the execution of the executives control frameworks and reception of MAP. Govindarajan (1988) added that hierarchical execution can be guaranteed by an ideal blend of association's current circumstance, technique, designs and frameworks.

6.2 Characteristics of Management Accounting Practice

The previous study recommends that Guide might be ordered by its degree of complexity. For example, Chenhall and Langfield-Smith (1998) characterized planning for arranging and control, execution measures for liability focuses, benefit detailing for business divisions, and cost-volume-benefit investigation for decision-production as conventional methods where various practice, for example, benchmarking, movement based costing and the executives, adjusted execution measures, group based execution measures and vital arranging procedures are gathered under contemporary strategies. Meanwhile, the International Federation of Accountants statement on Management Accounting Concepts (IFAC, 1998) has arranged Guide as per its ability to give administrative data to arranging, controlling and dynamic to make esteem. Specifically, a given MAP might be classified into four capacity levels (IFAC, 1998) as portrayed underneath.

1. *Cost determination and financial control*

The primer centers targets of this classification are deciding the expense of item by the utilization of direct labour. Here item costs were enhanced by spending plans and the monetary control of the creation processes which are basically oversimplified work serious. Planning and cost accounting

advances were a portion of the famous MAP in this classification which were ordinarily evolved before the 1950s.

2. *Provision of information for planning and control*

The majority of MAP in this category was created in the 1960s to supply information for control and planning functions. Through the use of technologies for decision-making and responsibility accounting, staff will assist line management in this way.

3. *Reduction of waste in business resources*

This classification of MAP emulates the data needs of associations in gathering expanding worldwide contest by the utilization of cycle examination and cost administration advances in giving data to help chiefs and workers. Presenting new administration and creation procedures, and the need to control cost levels through decrease of waste in assets, in both monetary and genuine terms, sent in the cycles were a portion of the drivers that shape the MAP ordinarily evolved during the 1980s.

4. *Creation of value through effective resource use*

MAP in this class features meeting worldwide rivalry by means of the production of client esteem, investor esteem and hierarchical advancement through the utilization of assets and the utilization of data handling advancements, which normally evolved during the 1990s. As per IFAC (1998), MAP in Classes 3 and 4 are viewed as a vital piece of the administration cycle to make an incentive for the association by using assets and constant data. For upper hand, associations need to pursue vital choices through the essential administration process. Also, to help with the essential administration exercises, MAP assumes the most noteworthy liability by giving both monetary and non-monetary data to lay out cutthroat systems. The idea of strategic MA is more extensive than the customary methodology, have an outer arranged approach and is generally client driven. Among the strategic MAP, the contemporary presentation estimation frameworks has been as often as possible talked about in the writing, for example in Ittner et al. (2003) and in Davis and Albright (2004), as the apparatus that works with technique implementation and upgrades hierarchical execution. As indicated by Ittner, et al. (2003), contemporary performance measurement

frameworks gives the data in both monetary and non-monetary terms that empowers the association to distinguish the methodologies which offer the most elevated potential to adjust its administration processes and to accomplish its targets. Franco-Santos et al. (2012) further shows that a contemporary performance estimation framework is a framework that utilizes both monetary and non-monetary execution measures to generalize key goals.

6.2.1 Traditional and Contemporary Management Accounting

According to Chenhall (2003), the field of management accounting (MA) has evolved from focusing solely on formal, internal, and financial information (traditional MA) to include a wider range of information including informal, external, and non-financial data (contemporary MA). The old management accounting (MA) has been criticised for losing relevance to modern enterprises. It no longer enables companies to respond to the current information needs of organisations and maintain a competitive edge (Johnson and Kaplan, 1987). This is likely due to the fact that the majority of these MAP were featured in textbooks and were created in the early 1900s. However, in the past few decades, the business environment and the structure of organisations have undergone significant changes (Kaplan, 1984). In addition, there is a shortage of costing data throughout the entire product life cycle, as well as a dearth of dependable cost information for making strategic decisions (Innes and Mitchell, 1995). The limitations of traditional market analysis gave rise to more recently developed market analysis techniques in the 1990s. Academics, practitioners, and consultants created new and supposedly sophisticated or contemporary Master of Arts programmes to meet the information needs of business managers in recent times (Burns and Vaivio, 2001). According to Chenhall and Langfield-Smith (1998a), contemporary management accounting (MA) is believed to offer more pertinent, precise, and suitable information in a timely manner to address the shortcomings of traditional MA.

Bjornenak and Olson (1999) differentiate modern MAP from conventional MAP by employing the notion of dissecting the invention of practice and scrutinising their components. The distinctions between conventional and current MAP have been delineated, along with other related research. Conventional Management Accounting Practice primarily prioritise internal and financial data derived from a financial accounting system. They typically have a limited emphasis on the short term and lack awareness of strategic priorities (Guilding et al., 2000). The time period

is predetermined and typically aligns with a financial accounting period or calendar time. Cost objects like as goods or responsibility centers/departments, along with causal variable elements like production volume, labour hour, or machine hour, are essential components of classic MAP (Bjørnenak & Olson, 1999).

In contrast, modern Management Accounting Practice (MAP) place greater emphasis on non-monetary data, adopt an external perspective by considering customers and competitors, and have a more strategic focus (Chenhall & Langfield-Smith, 1998a). The time period is highly adaptable to meet the requirements of management. Cost objects in modern management accounting practice (MAP) exhibit a greater range of diversity compared to those found in older MAP. These entities can encompass a wide range of categories, including products, departments, consumers, activities, distribution methods, brands, market segments, and even competitors. Thus, the causative variable factors for current MAP encompass a wider range of parameters, including both volume and nonvolume factors, related to both internal and external causes (Bjørnenak and Olson, 1999). Many authors have adopted the concept of diffusion to understand the spread of management accounting (MA) innovations, such as strategic management accounting (SMA), activity based costing (ABC), and balanced scorecard (BSC). This approach aims to explore the factors that drive the adoption of these new management accounting practice (MAP) and the changes they bring.

Research on the adoption of both conventional and current MAP has been conducted in recent decades. Contrary to popular belief, recent studies suggest that the adoption rates of newly developed MAP are disappointing, while traditional MAP continue to be widely used in countries such as the U.K., U.S., Australia, New Zealand, and various Asian countries (Bright et al., 1992; Drury et al., 1993; Szendi and Elmore, 1993; Chenhall and Langfield-Smith, 1998a; Adler et al., 2000; Guilding et al., 2000; Joshi, 2001; Luther and Longden, 2001; EI-Ebaishi et al., 2003; Phadoongsitthi, 2003; Sulaiman et al., 2004). These studies have mostly focused on describing and frequently utilised the contingency technique to elucidate the adoption of different MAP. This raises the overarching question of the significance of traditional MAP and the advantages derived from modern MAP. In relation to this matter, it is crucial to establish significant strategic action plans (MAP) that can be utilised to get a competitive edge and enhance overall organisational performance.

Literature Matrix 6.1: List of MAP from Previous Research (Continued)

Variable in form	Details	Chenhall and Langfield-Smith (1998a; 1998b)	Luther and Longden (2001)	Joshi (2001)	Phadoongsitthi (2003)	Abdel-Kader and Luther (2008)
		1	2	3	4	5
	Aspects of Costing System (Traditional Costing)					
ACS_1	Department or multiple plant-wide overhead rates					✓
ACS_2	Separation of variable and Fixed cost					✓
ACS_3	Job order costing					
ACS_4	Batch costing					
ACS_5	Process costing					
ACS_6	Absorption Costing/ Full cost accounting	✓	✓	✓	✓	
ACS_7	Standard costing					✓
ACS_8	Variable/ Marginal costing	✓	✓	✓	✓	
	Aspects of Costing System (Contemporary Costing)					
ACS_18	Activity based Costing (ABC)	✓	✓	✓	✓	
ACS_19	Throughput Costing					
ACS_20	Target Costing	✓		✓	✓	✓
ACS_21	Life Cycle Costing	✓		✓	✓	✓
ACS_22	Kaizen Costing					
	Aspects of budgeting practice (Traditional Budgeting)					
ABP_1	Budgetary Control					
ABP_2	Budgeting for (short term) planning					✓

ABP_3	Budgeting for controlling cost	✓	✓	✓		✓
ABP_4	Master budgets					
ABP_5	Flexible budget					✓
ABP_6	Budgeting for long term(strategic) plans					✓
	Aspects of budgeting practice (Contemporary Budgeting					
ABP_7	Activity-based budgeting (ABB)	✓	✓	✓		✓
ABP_8	Zero-based budgeting (ZBB)					✓
ABP_9	Budgeting with "what if analysis"					✓
ABP_10	Continuous/rolling budget					

	Aspects of Performance evaluation system (Traditional Financial measure(s))					
APES_1	Ratio Analysis					✓
APES_2	Cash flow Statement Analysis					✓
APES_3	Income Statement & Balance sheet Analysis					✓
APES_4	Variance Analysis					✓
APES_5	Fund Flow Analysis					✓
APES_6	Return on Investment (ROI)	✓	✓	✓	✓	
	Aspects of Performance evaluation system (Contemporary Financial measure(s))					
APES_7	Economic value add (EVA) or Residual income	✓	✓	✓	✓	✓
APES_8	Segment Reporting	✓	✓	✓	✓	
APES_9	Balance Scorecard	✓	✓	✓	✓	
	Aspects of Performance evaluation system (Traditional Non-financial measure(s)					

APES_10	Non-financial measure(s) related to customers	✓	✓	✓	✓	✓
APES_11	Non-financial measures(s) related to operation and innovation	✓	✓	✓	✓	✓
APES_12	Non- financial measure(s) related to employees	✓	✓	✓	✓	✓

	Aspects of Information for pricing & Decision making (Traditional Techniques					
ADM_1	Cost-Volume-Profit Analysis	✓	✓	✓		✓
ADM_2	Product profitability analysis	✓	✓	✓	✓	✓
ADM_3	Stock control models (Inventory)					✓
ADM_4	Evaluation the risk of major capital investment projects by using probability analysis or computer simulation					✓
ADM_5	Evaluation of major capital investments based on discounted cash flow method(s)					✓
ADM_6	Evaluation of major capital investments based on pay-back period or average rate of return	✓		✓	✓	✓
ADM_7	For the evaluation of major capital investment, non-financial aspects are documented and reported					
ADM_8	Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation					✓
ADM_9	Performing sensitivity “what if” analysis when evaluating major investment project					✓

Panel B: List of SMA Practice

Variable in form	Aspects of Strategic analysis	Guilding (1999)* Guilding	Guilding et al. (2000)	Cadez (2006)	Cadez (2007)	Cadez and Guilding (2008)
		1	2	3	4	5
	Strategic Planning, control and performance measurements					
ASA_1	Benchmarking			✓	✓	✓
ASA_2	Integrated performance measurement system			✓	✓	✓
	Customers Accounting					
ASA_3	Customer Accounting					
ASA_4	Customer profitability analysis			✓	✓	✓
ASA_5	Lifetime customer profitability analysis			✓	✓	✓
ASA_6	Valuation of customer as assets			✓	✓	✓
	Strategic decision-making					
ASA_7	Brand valuation		✓	✓	✓	✓
ASA_8	Strategic Pricing	✓	✓	✓	✓	✓
ASA_9	Strategic costing	✓	✓	✓	✓	✓
	Competitor Accounting					
ASA_10	Competitive position monitoring	✓	✓	✓	✓	✓
ASA_11	Competitor cost assessment	✓	✓	✓	✓	✓
ASA_12	Competitor performance appraisal based on published financial statements	✓	✓	✓	✓	✓
ASA_13	Analysis of competitors' strength and weaknesses					✓

	Strategic Costing					
ACS_23	Value Chain Costing		✓	✓	✓	✓
ACS_24	Back-Flush costing					✓
ACS_25	Quality Costing		✓	✓	✓	✓
ACS_26	Six sigma					
ACS_27	Value engineering					
ACS_28	Total Quality Management (TQM)					

6.3 Management Accounting Frameworks

Management accounting provides solutions to both organized and chaotic problems and is located at the center of an organization (CIMA, 2015). Understanding the four Goals of Management Accounting Principles (GMAP), which were created by the American Institute of Certified Public Accountants (AICPA) in collaboration with the Chartered Institute of Management Accountants (CIMA), is essential to the implementation of management accounting. GMAP are guidelines for best management accounting practice that are designed to make it possible to make difficult decisions. This then guarantees that MAP are used in accordance with instructions to produce the desired results. The following three elements are necessary for the four principles to be applied effectively:

i) realizing the importance of management accounting in achieving long-term success;

ii) employing suitable tools and techniques that need to be continually improved, and

iii) conducting an environmental assessment to pinpoint areas in need of improvement (CIMA, 2015).

The MAP have created different costing model structures for use. For example, Greenberg and Wilner (2015) proposed an item costing model system. The IMA (2014) proposed an administrative costing system that tended to the necessities of administrative choice

complementing in costing models. Cokins (2001) fostered an MA system with a “tree, branch, and leaf” structure. Figure 1 represents the system that was proposed by Cokins in 2001.

Cokins put together the structure with respect to the costing point of support, by proposing that cost estimation and cost utilizes were cardinal parts of the MA. The expense estimation part of the system contained the expense assortment strategies as well as the expense task techniques. Alternately, the expense utilizes branch enveloped the dynamic help capability that included functional control, execution estimation and prescient preparation (Cokins, 2001). As is obvious structure the abovementioned, Cokin's system gives negligible consideration to execution assessment and arranging and is quiet about different mainstays of the MA. Costing systems, budgeting systems, performance evaluation systems, decision support systems, and strategic management accounting are the five pillars of management accounting. These five pillars have been identified by several academics as the main elements of management accounting, and they have been used to analyze management accounting (Abdel-Kader & Luther, 2006; Ahmad, 2017; Dlamini, 2020). The five MAP components are separated, which makes it simple to comprehend and use the managerial accounting environment.

1. **Generalizability:** The framework was developed based on a review of existing literature and case studies, which may limit its generalizability to different industries or organizational contexts. The effectiveness and applicability of the framework may vary across diverse settings, such as manufacturing, service, or non-profit organizations.
2. **Lack of Empirical Testing**: The framework does not provide empirical evidence or statistical analysis to support its claims or validate the relationships between variables. While the framework is conceptually sound, empirical testing is necessary to assess its practical applicability and determine the significance of the relationships proposed.

Dynamic Nature of Management Accounting: The framework may not fully capture the dynamic nature of management accounting practice. The field of management accounting is constantly evolving, influenced by technological advancements, changing business environments, and emerging trends. The framework may need regular updates and modifications to reflect the evolving nature of management accounting practice.

Limited Scope: Ahmad's framework focuses primarily on the cost management aspect of management accounting, neglecting other important areas such as performance measurement, decision-making support, and strategic management accounting. The framework's narrow focus may not capture the full range of management accounting practice and their interrelationships.

Limited Attention to Contextual Factors: The framework does not explicitly consider the influence of contextual factors such as industry characteristics, organizational culture, or national culture. These factors can significantly shape the adoption and effectiveness of management accounting practice. Incorporating contextual factors into the framework could enhance its applicability and relevance across different organizational contexts.

In the wake of surveying the MAP, the analyst noticed that there has been expanding consideration, especially in developed nations, since 2000s to the reception of recently evolved MAP. This was clear through the MA studies led toward the beginning of 21th 100 years (Abdel-Maksoud et al., 2005). In any case, similar examinations uncovered that conventional rehearses were all the while being utilized in created nations and this was upheld by Dugdale et al. (2006) concentrate on in the UK. As to, there was likewise a propensity towards the reception of cutting edge MA rehearses as referenced by certain examinations (Nimtrakoon, 2009), however this was primarily in developing countries (e.g., China, Malaysia, and Thailand).

Kittredge (2009) focuses to the need of the MA structures by contending that MA is particular from monetary accounting. In particular, the MA rises above the customary quiet submission with monetary detailing rules and systems. The MA gets its quintessence from the essential capability it plays in corporate preparation and decision making. Greenberg and Wilner (2015) have featured that the absence of the MA systems has hampered the take-up of the MA. A few researchers have proposed that it is basic to have an MA structure for direction in the use of MAP as it improves the take-up of the MA (Greenberg and Wilner, 2015).

The implementation of a new management accounting practice framework for manufacturing companies holds significant importance, as supported by prior literature. Here are some key points highlighting the importance of such a framework:

1. **Enhanced Decision-Making**: A well-designed management accounting framework enables manufacturing companies to make informed and data-driven decisions. According to prior literature (e.g., Ittner et al., 2003), effective management accounting practice contribute to better decision-making by providing relevant and timely information on costs, profitability, performance, and resource allocation. This leads to improved decision quality and enables the organization to respond quickly and effectively to market changes and competitive pressures.
2. **Improved Performance Measurement**: Literature suggests that traditional financial metrics alone may not capture the full performance of manufacturing companies (e.g., Kaplan and Norton, 1996). A comprehensive management accounting practice framework incorporates a balanced scorecard approach, encompassing both financial and non-financial performance indicators. This allows companies to evaluate various dimensions of performance, such as quality, efficiency, customer satisfaction, and innovation, leading to a more holistic understanding of organizational performance.
3. **Cost Management and Efficiency**: Effective cost management is crucial for manufacturing companies to maintain profitability and competitiveness. Prior literature (e.g., Cooper and Kaplan, 1992) highlights the importance of implementing advanced cost accounting techniques, such as activity-based costing (ABC), to accurately allocate costs and identify areas of cost inefficiencies. A well-designed management accounting framework enables companies to track and analyze costs at various levels, facilitating cost reduction initiatives, process improvements, and waste reduction.
4. **Strategic Investment Decisions**: Manufacturing companies often face the challenge of identifying and prioritizing investment projects. Prior literature (e.g., Cooper et al., 2002) suggests that a systematic approach to investment appraisal, incorporating financial and non-financial factors, enhances decision-making and resource allocation. A management accounting framework provides methods such as net present value (NPV) and internal rate of return (IRR) to evaluate the feasibility and value of investments, contributing to better strategic decision-making and resource allocation.
5. **Continuous Improvement and Innovation**: Manufacturing companies need to continuously improve their processes, products, and services to stay competitive. Literature (e.g., Ittner and Larcker, 2001) highlights the role of management accounting in fostering

a culture of continuous improvement and innovation. By providing performance measurement, analysis, and reporting systems, a framework enables companies to identify improvement opportunities, monitor progress, and encourage employee involvement in driving operational excellence and innovation.

6. **Risk Management**: Manufacturing companies face various risks, including supply chain disruptions, market volatility, and regulatory changes. Prior literature (e.g., Sandelin, 2008) emphasizes the importance of integrating risk management with management accounting practice. A comprehensive framework enables companies to identify, assess, and mitigate risks through risk analysis, contingency planning, and performance monitoring, thereby enhancing resilience and ensuring business continuity.

Given the advantages that are related with the utilization of the MA, the structure will improve the use of MAP since the MA makes and supports the worth of the element (Lucas et al., 2013). Moreover, earlier examinations uncovered that there is a relationship between's the use of MAP and accessibility of assets inside an element (Ahmad, 2017) in such manner, a positive take-up of MAP is probably going to expand the accessibility of assets inside a substance that thusly will additionally improve simplicity of use of all MAP classifications. The reception of the system will empower the utilization of MAP in a normalized approach. The proposed MA system is besides educated by a survey regarding existing MA structures. The accompanying segment examines the current MA structures.

Stage 1: Costing Pillars

The underlying phase of a dynamic system is to decide the expense of an item or a help. Other MA support points can't be as expected executed in the event that the costing support point isn't applied unequivocally (Yoshikawa, 1994; Lukka and Granlund, 1996). Costing frameworks play a guard dog capability and keep a substance's costs in accordance with its overall revenues (Dlamini, 2020). A costing framework, in the words of Kaplan (1994), “has a slew of structures, dynamics, controls, and reports designed to total and inform the board on incomes, expenses, and benefits.” Clients, divisions, offices, cycles, goods and services, creative work, and deals locations that have been costing-focused could all be included in the area. According to Uyar and Kuzey (2016), “cost accounting framework as a product costing framework or a costing framework, which is used by

the organization to predict the cost of their products for different purposes, like: productivity analysis, stock valuation, and cost control." Data about the actual expense of items is fundamental assists organization with estimating which merchandise are profitable and which are not, and this must be chosen in the wake of deciding the right expense of the thing. Besides, a particular item costing system supports deciding a definitive worth of materials stock, work underway, and finished stock with the end reason for delivering a spending plan synopsis or budget report. Research shows that the data on item costs created by costing frameworks has a wide number of purposes, such as: valuing choices; cost control (Van Triest and Elshahat, 2007); an assessment of creation cycles; and move estimating (Yoshikawa et al 1989).

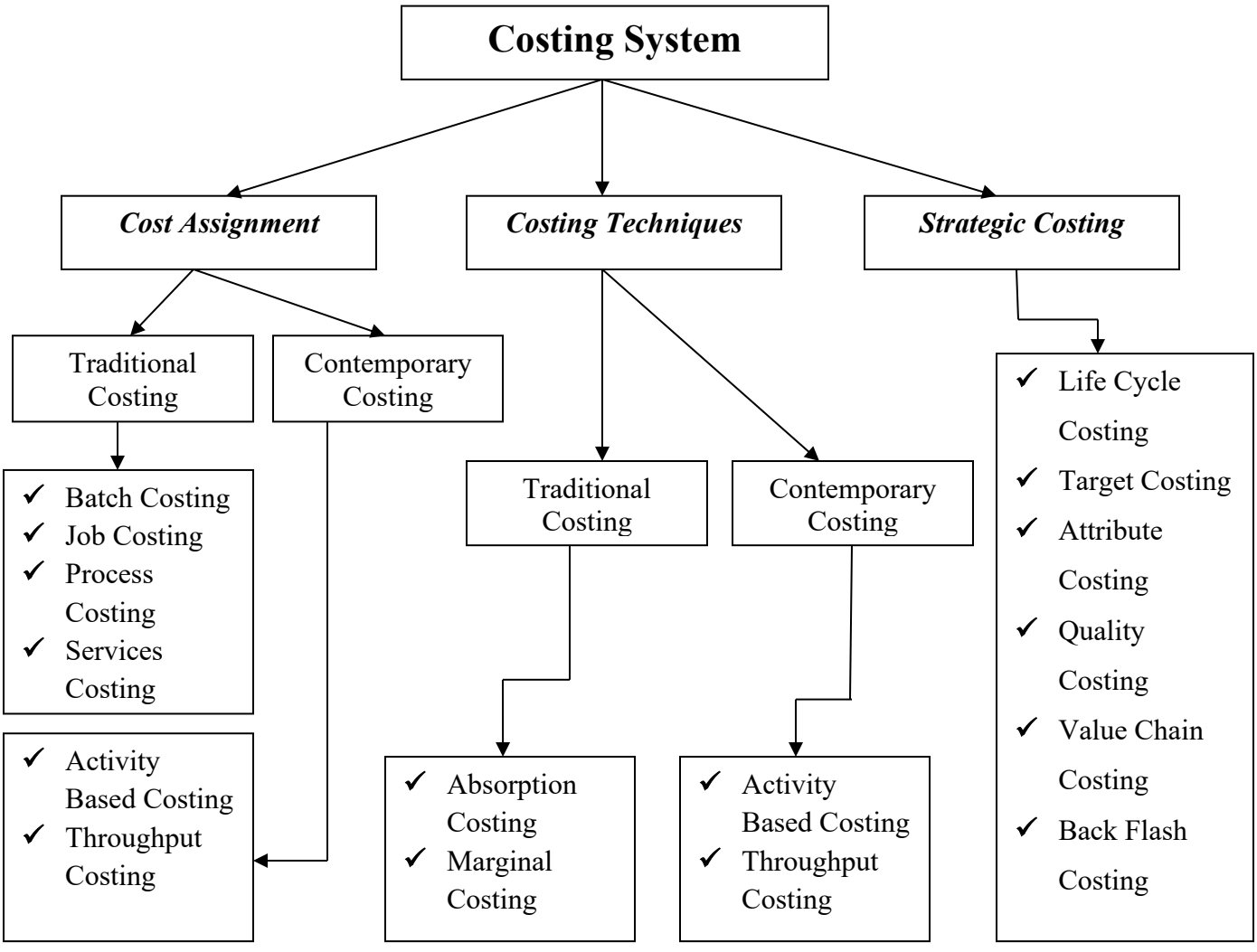


Figure 6.1: Costing Pillars

Source: Own formulation

The utilization of costing framework ought to consider the idea of the business under which the element works in and the creation flowchart (Drury, 2012). For example, assuming the substance is working in the assistance business the element ought to apply administration costing, on the off chance that an element makes items in bunches it ought to utilize group costing and on the off chance that it is in nonstop creation it ought to apply process costing. Legitimate costing guarantees a positive outcome as it prompts right item valuing, suitable navigation and productivity. Costing frameworks have two branches and these are cost task and costing strategy (Ahmad, 2012). Under cost assignment and costing techniques, there are traditional and contemporary methods as depicted in Figure 6.1.

Cost assignment empowers the relegating of expenses for an item or administration to decide the unit cost for that specific item or administration (Dlamini, 2020). Stage one of the structures proposes the utilization of traditional costing frameworks as they are not costly and are easy to use when contrasted with contemporary frameworks which require progressed accounting aptitude. In the wake of deciding the expense of an item or a help, the subsequent stage is to make arrangements for the assets that are expected to creation a specific item.

Stage 2: Budgeting Pillars

Budgeting is a fundamental device for estimating, allotting assets and controlling exercises in the establishment. The meaning of a spending plan has developed over the long haul and most scholastics currently settle on a generally standard definition which sums up a spending plan as a quantifiable arrangement (Drury, 2012; Collier, 2012). The spending plans ready in associations will for the most part originate from the need to deliver an expert spending plan containing a planned pay explanation, planned proclamation of monetary position, and planned income proclamation. Taking care of the expert spending plan will be various other monetary and non-monetary spending plans which will contain detail of the associations functional and asset needs for the impending time frame (Bhimani et al, 2012).The budgeting system has two branches, the "types of budgets and the budgeting approach" and these have both traditional and contemporary components (Ahmad, 2012), as illustrated in Figure 6.2.

The principal advantages of budgeting frameworks and their life span come from their capacity to fulfill various capabilities inside associations. According to the administration viewpoint, planning assumes a significant part during the time spent independent direction in regards to speculation and business creation. Past investigation shows that the chief purposes behind arranging can't avoid being organizing future execution; orchestrating the future financial position; orchestrating future earnings; orchestrating future regular assignments; and controlling costs (Fruitticher et al., 2005). Budgeting is additionally utilized for execution assessment, correspondence of objectives and technique development (Sulaiman et al., 2004), to organize exercises across specialty units (Chenhall and Langfield-Smith, 1998); and for ideal acknowledgment of issues and to work on the following period's budget (Joshi et al., 2003).

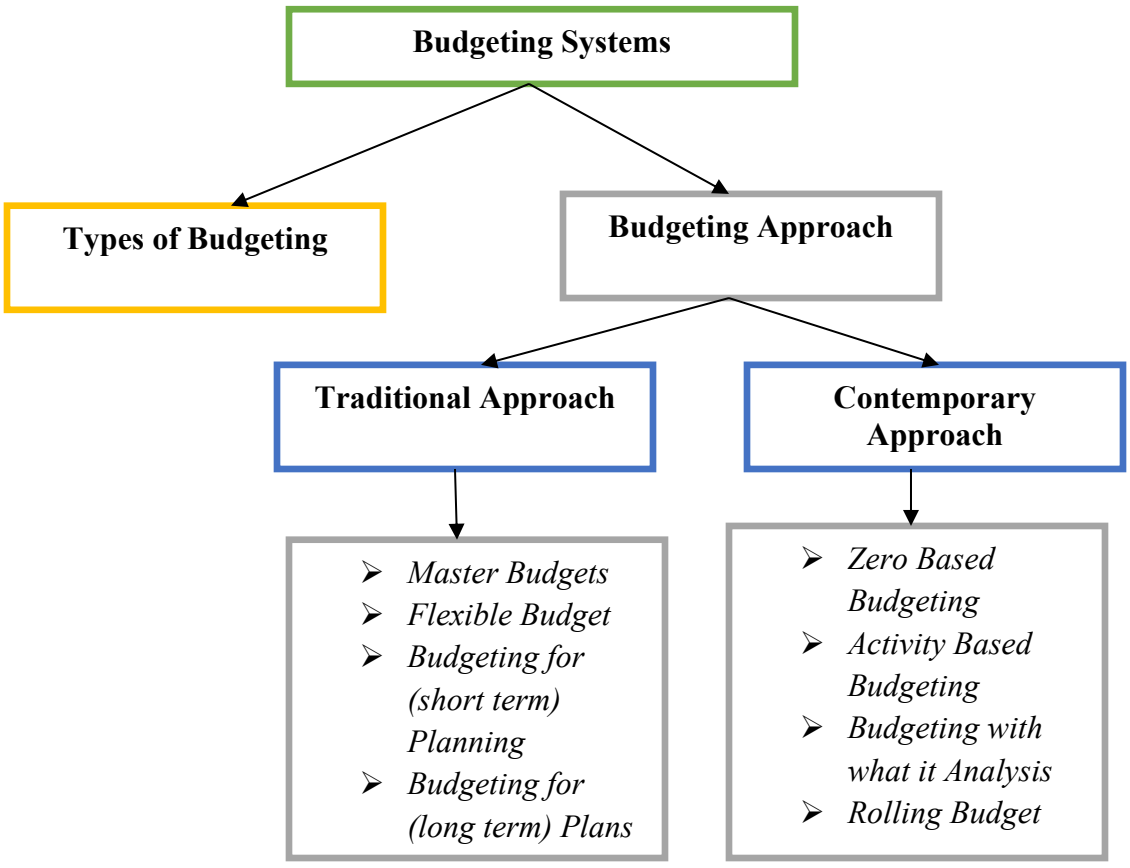
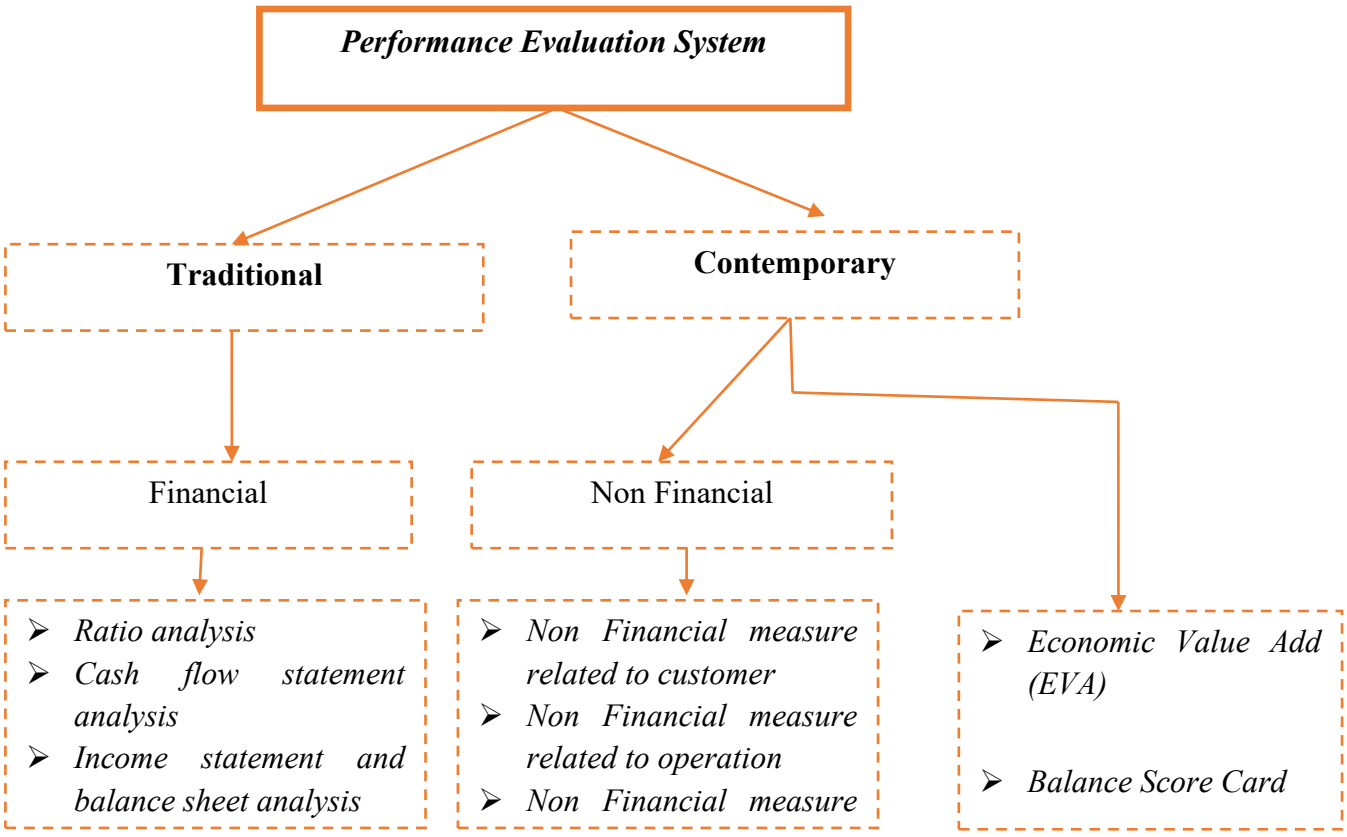


Figure 6.2: Budgeting Pillars

Source: Own formulation

Stage 3: Performance Evaluation Pillars

The third stage is to assess the performance of different parts of the element against the underlying arrangement. Performance assessment further goes about as an aide in helping chiefs in arranging and benchmarking for future periods (Neely et al., 1995). Performance estimation shouldn't just be review however forthcoming also (Bhimani and Bromwich, 2010). Encounters should illuminate future field-tested strategies assuming achievement is to be ensured (Lorenz, 2015).



Source: Own formulation

Figure 6.3: Performance Evaluation Pillar

Monetary/financial measures, for example, return for money invested and benefit measures were broadly utilized in many nations: in U.K (Abdel-Kader and Luther, 2006); in Japan (Abdel-

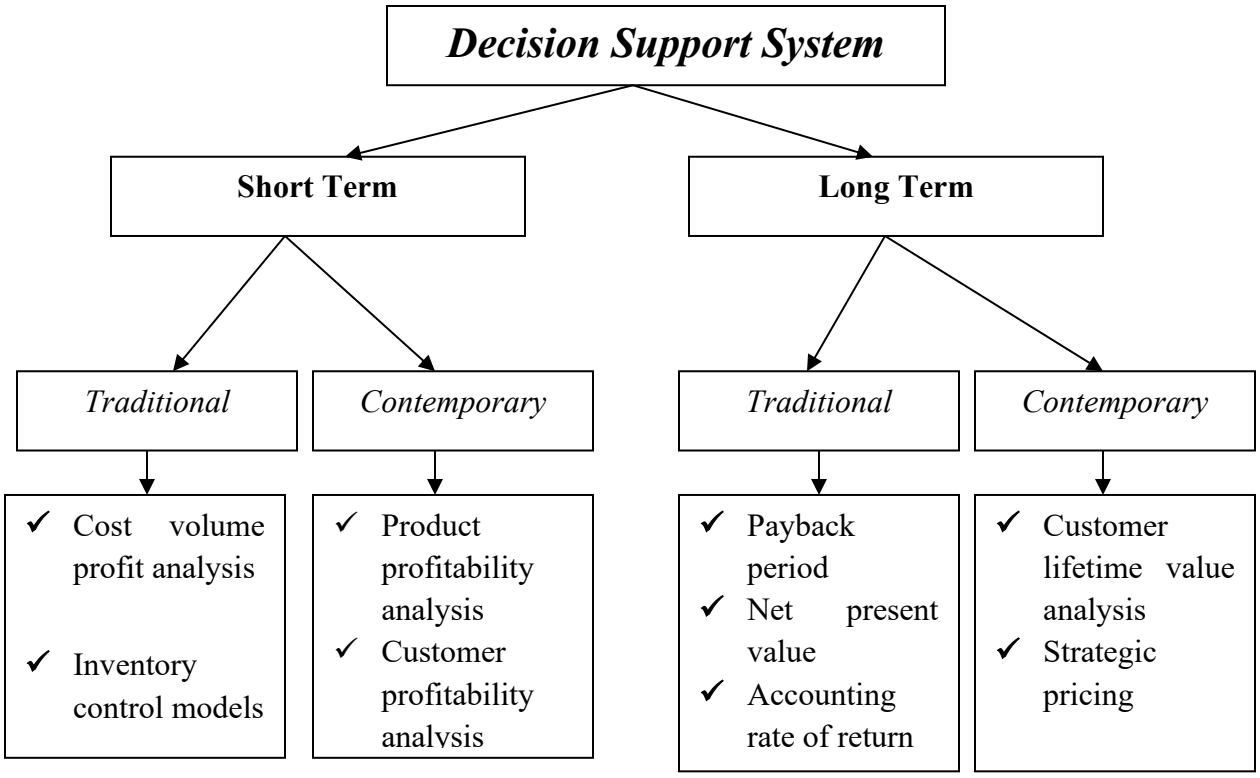
Maksoud et al. 2008). The writing uncovered that the monetary measures are profoundly involved by the engineering business when contrasted with non-monetary measures as These actions use information that is handily gotten from monetary detailing. Notwithstanding, the utilization of monetary accounting data in execution assessment has been censured on account of its weakness to control (Ittner and Larcker, 2001). Non- financial measures that are connected with the activity and advancement, Non-monetary measures that are connected with clients, Benchmark of performance assessment and non-financial measures about representatives.

Financial measures give factual markers on the presentation of an element while the non-monetary/financial measures evaluate both the inside and the outside setting of the business they are correlative and when utilized related, give a comprehensive image of business execution. The utilization of non-financial measures depends on the idea of the business and a substance's item portfolio (Bhimani & Bromwich, 2010).

Stage 4: Information for Pricing and Decision Making

The decision support pillar is the focus of the fourth stage. Since managers at different levels have some independence and are exposed to both planned and unforeseen circumstances, decision-making is a crucial component of management (Wu et al., 2007). Following a performance review, managers must take well-informed decisions that support a company's competitiveness and sustainability (Ahmad & Zabri, 2015). The pillar of decision support is shown in Figure 6.4.

The decision supportive network has two parts, the short-term and the long-term and these parts have both traditional and contemporary strategies (Ahmad, 2012). Abdel-Kader and Luther (2006) fought that for customary or transitory decisions the MA can use cost-volume-profit (CVP) examination, thing efficiency assessment, and client benefit assessment, and stock control, models. For longer-term capital hypothesis decisions MA can make and review accounting speeds of return and reward periods as well as awesome signs considering restricted pay. Capital arranging methodologies get both non-perpetually restricted moves close. Drury et al. (1991) battled that the transcendence of IRR and NPV assessment has been on and on displayed under conditions of sureness.



Source: Own formulation

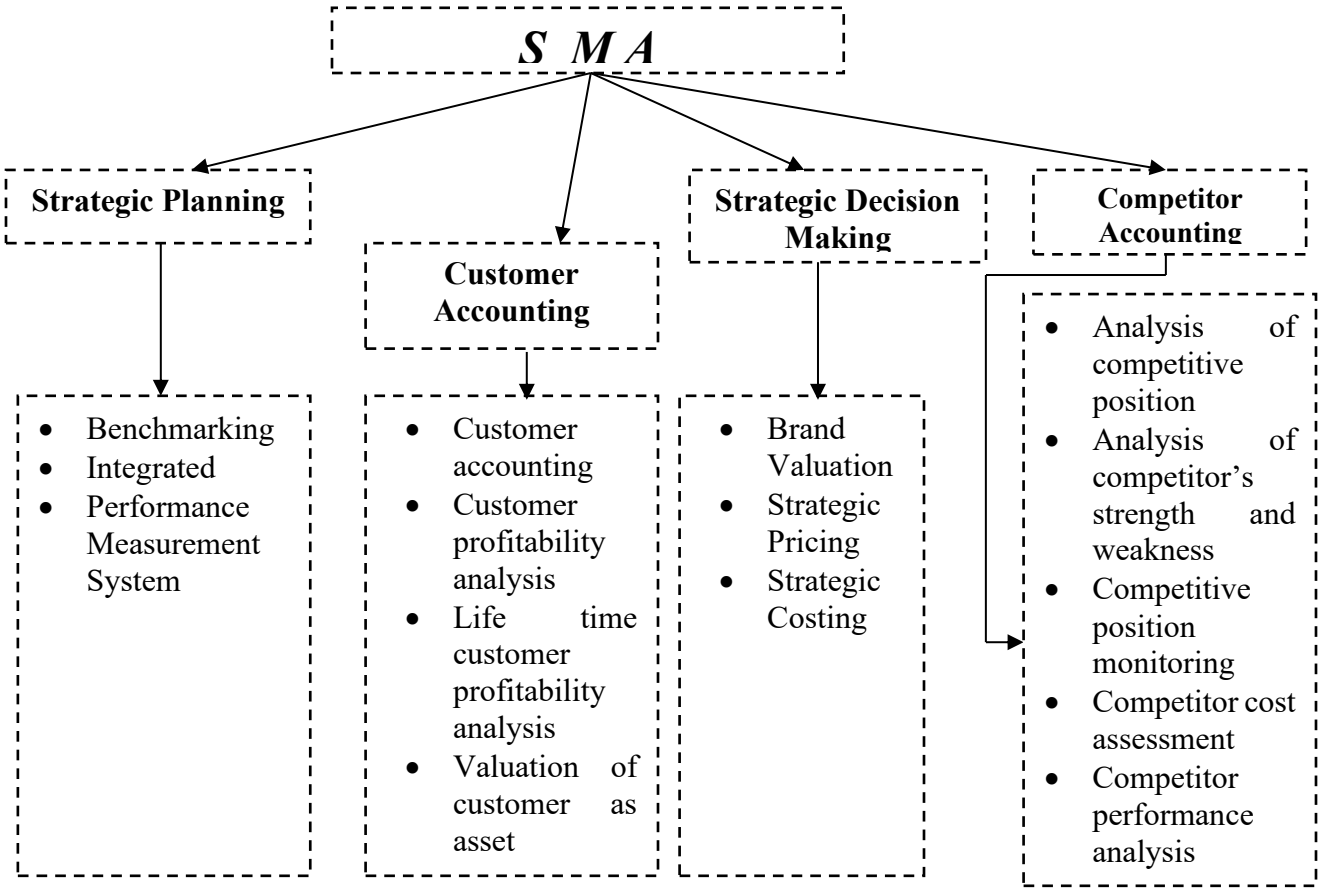
Figure 6.4: Decision Support System

In light of this, the framework suggests using conventional techniques for both short-term and long-term systems to support decisions. The traditional methods can be used lacking the aid of cutting-edge technology; in other words, they only require basic training for the accounting staff to be effective. When making decisions about matters that must be resolved within a year, short-term techniques are used, and operational capital is used rather than capital investment (Drury, 2012).

Stage 5: Strategic Management Accounting Pillar

By dissecting financial and non-financial data, strategic management accounting (SMA) keeps track of the strategies of both the entity and its competitors with the goal of creating a long-term business plan (Bromwich, 1990). Stages one through four must be carried out successfully before stage five can be implemented. SMA, in contrast to the other four pillars, is a modern accounting

technique with no historical precedent. The use of strategic MA devices has become vital for all associations, particularly the assembling ones to get by and fill despite the consistently aggressive, complex, and changing business climate (Ojua, 2016). The CIMA, in 2005, depicted SMA as a type of the MA by which accentuation was put on data which connects with factors outer to the endeavor, as well as non-monetary data and inside produced data (Cadez and Guilding, 2008). Ojra (2014) detailed that the use of SMA methods is affected by apparent natural vulnerability (Market Choppiness), hierarchical innovation, size of the venture (larger enterprises are more likely to adopt SMAP), and miner type system. While key direction is helped by opportune data and information which advance expanded creation, the no accessibility of such consistently results to restricted development, stagnation, or the breakdown of the area.



Source: Own formulation

Figure 6.5: Strategic Management Accounting Pillars

The model developed on the more recent study done by Cadez and Guilding (2008) where he drew sixteen SMA techniques from previous works, and they classified these techniques into five broad categories with three categories embodying themes of management accounting discussed in management accounting literatures. They are;

1. Costing including; Attribute costing, Life-cycle costing, Quality costing, Target costing and, Value-chain costing.

2. Planning, control and performance measurements including; Benchmarking Integrated and, performance measurement.

3. Strategic decision-making including: Strategic costing, Strategic pricing and, Brand valuation.

4. Competitor Accounting including: Competitor cost assessment, Competitive position monitoring and, Competitor performance appraisal.

5. Customers Accounting including: Customer profitability analysis, Lifetime customer profitability analysis and, Valuation of Customers as Assets.

6.4 Research into Specific Areas of Management Accounting Practice

The studies mentioned above only provide a high-level overview of MAP. This section examines research on particular MAP and methods. The majority of studies have focused on budgeting, performance evaluation, and costing systems. Less research is done on strategic management accounting and decision support systems.

6.4.1 Costing

Research shows that the data on item costs created by costing frameworks has a wide number of purposes. These purposes incorporate, for instance, valuing choices; cost control, (Van Triest and Elshahat, 2007); an assessment of creation cycles; and move estimating (Bjornenak, 1997). Anyway research has zeroed in on which costing frameworks are utilized by firms. The

accompanying conversation surveys proof fair and square of take-up of costing frameworks from past examinations.

Among assimilation costing and direct (factor) costing, ingestion costing framework is general favored around the world. For instance in his review Drury et al. (1993) saw 58 percent of U.K firms frequently or consistently utilized assimilation costing and Scherrer (1996) observed that this rate was around 50% in German firms. Once more, a covering made by Safeguards et al. (1991) among Japan and the U.S announced that U.S organizations' use was somewhat higher than that of Japanese organizations. All the more as of late, Szychta (2002) found that 90% of firms took on this strategy. In emerging nations take-up rates are comparable. For instance, in India, Joshi (2001) announced portion of Indian firms embraced this strategy and Firth (1996) uncovered 66 percent of Chinese unfamiliar based organizations applied this procedure.

The utilization of direct (factor) costing is likewise boundless. Lukka and Granlund (1995) showed that 42% of Finnish firms applied variable costing where Abdel Kader and Luther (2006) demonstrated the rate was a little more than 50% in English firms. Conversely, in agricultural nations, Firth (1996) state that, 76 percent privately based Chinese organizations utilized variable costing. In therir concentrate on Joshi (2001) and Phadoongsitthi (2003) noticed in excess of 50% of the organization in the created country, similar to: India and Thailand applied this technique. The direct costing framework, which only assigns direct expenses to cost objects, is thought to be the most oversimplified. It was followed by the variable costing framework, which is similar to direct costing but assigns cost objects to the variable the degree of the erroneous (above) expenses in addition to the immediate costs. The other two type’s retention and ABC frameworks are more advanced because they assign all assembling costs immediate, direct, and indirect to cost objects. As a result, they are referred to as full costing frameworks. The ABC framework can deliver cost data that is more precise than that provided by AC frameworks; it has been demonstrated through theory and practice. The advocators of the ABC framework have asserted its capacity to ascertaining the expense of results all the more precisely is because of utilizing both volume and no-volume cost drivers and both manufacturing and non-manufacturing expenses to all the more likely address the assets consumed side-effects. Besides, this has been affirmed exactly by a flood of ABC research that displayed in a greater part of these examinations the prevalence of ABC over conventional costing frameworks as far as lengthy and transient benefit, revealing precise item

expenses, and client care level (Lea, 2007). Lamminmaki and Drury (2001) found that the rate of ABC adoption and the intention to use ABC comparatively greater in New Zealand then UK companies. The result was similar but slightly stronger uptake of ABC in developing countries for example, Ghosh and Chan, (1997).

However, there are two significant cost accounting systems: job order costing (JOC) and process costing (PC) (Edwards and Newell, 1991; Layne, 1994). Job order costing (JOC) is an expense accounting structure that gathers creation costs independently for each work. It is proper for organizations engaged in the making of excellent things and stand-out orders (Hoque, 2005). Process costing (PC) is a CA structure that gathers fabricating costs independently for every collaboration. It is, for instance, the cost accounting structure utilized by gasoline treatment plants, compound producers, etc. Ali UYAR (2010) observed that in Istanbul, the most generally utilized costing strategy is work costing, followed by action-based costing and cycle costing, where the main focuses for the utilization of occupation costing broadly are the material business since they make particular items and the use of action-based costing to a great extent by the synthetic compounds and plastics industry. Once more, the most broadly utilized above distribution bases were prime expenses (65.6 percent), units created (19.7 percent), and direct work costs (19.7 percent).

However, Harris and Durden (2012) arranged costing as activity-based costing (ABC) and the second is inter-organizational cost management. Due to the quick change in the business conditions the use of activity based costing, almost all out of time, complete quality organization gadgets have emerged in affiliations. In 1980, ABC thoughts emerged in associations, and in 1990 this thought was used to control costs in a successful way. However, ABC isn't immediately used by the relationship of the world (Abdel-Kader and Luther, 2008). As of now, the notable idea of costing is the objective costing and kaizen approaches. These frameworks are reliably used to lessen the cycle expenses of the thing and thing plan for their consistent upgrades in the affiliations. It helps in to design strong creation costs, arranging orchestrating, etc for the affiliation (Monden, 1993). As demonstrated by Abdel-Kader and Luther (2008) the chief instruments for a costing system integrate fixed and variable costs, above rates in view of plant and division, assumption to learn and adjust, cost of significant worth, target costing and activity based costing. A couple of assessments have maintained that target costing and development based costing are the two key

methods for relationship to make benefits for the associations in general. Through these practice' choice creation for the board ends up being straightforward and more precise in an affiliation (Sleihat, et al., 2012). According to Tabitha and Ogungbade (2016)'s observations of the cost accounting practice used by the manufacturing and service industries over the past ten years, techniques that are appropriate for manufacturing concerns also apply to the service industry. The author concentrated on two groups since costing data is useful for all businesses as they generate revenue and incur costs. Traditional cost accounting techniques include Standard Costing, Absorption Costing, and Marginal Costing. Modern techniques include "Activity Based Costing (ABC), Target Costing, Life Cycle Costing, Just in Time System, Throughput Accounting/costing, Back Flush Costing, and Kaizen costing", among others. According to the study, within the last ten years, "Just in Time (JIT), Activity Based Costing (ABC), Target Costing, Life Cycle Costing, Throughput Accounting, and Kaizen costing" have become the most popular techniques in manufacturing businesses. The study also discovered that the application of these techniques depends on the actual situation, including the company's size, organizational culture, technological level, and product development stage. Similarly, Mazumder (2007) discovered that while many multinational corporations use modern techniques like "Activity Based Costing, Just in Time, Total Quality Management, Process Reengineering, and Theory of Constraints" the public and private manufacturing enterprises in Bangladesh do not. These modern techniques, particularly Just-in-Time system and Total Quality Management, are used by a small number of multinational corporations. Drury (2005) stated that expenses are controllable sooner or later characterized by the administration level. For instance, top administration has the ability to discard offices and increment or reduction the quantity of supervisors utilized. Since all expenses can't be controlled at lower the executives levels, so there is a requirement for expenses to be ordered by controllable and non-controllable classes in the exhibition reports that the accountants plans for every obligation community. Shah et al. (2011) remarked that on the off chance that expenses were not ordered along these lines, it would be challenging to assess a supervisor's performance, and in this way, directors might lose interest in cost control when they observed that their presentation was decided on things that were unchangeable as far as they might be concerned.

Abernathy et al. (2001) concentrated on the impacts of various contingent variables for example item variety, advanced manufacturing technology (AMT), and cost structure on the plan decisions

of costing frameworks utilized in five unique destinations in Australia. Here a structure was created to portray the complexity level of costing frameworks. In detail, only one of the locales proclaimed utilizing a generally refined costing framework while the other utilized just a conventional costing framework. In any case, the administration of the last option site was not content with the precision of cost data especially that utilized for simply deciding and setting costs. As to other three destinations, they proclaimed utilizing the conventional costing frameworks and remarked that such frameworks are satisfactory given the low degree of item variety and overheads.

The USA accounting analysts were the primary who reviewed the down to earth condition of costing frameworks particularly after the rising reception of computerization among US manufacturing organizations. Hendricks (1988) concentrated on the costing frameworks utilized in seven industry classifications utilizing a poll review. The discoveries in light of 85 usable surveys, brought up the presence of significant worry over CAP among the answered organizations. In subtleties, the larger part was utilizing full AC and just 15% utilized variable costing. In any case, this was legitimate as the level of assembling above costs in these organizations was somewhat high around 33% of their absolute expenses. At last, in regard of the sort of utilized overheads distribution bases, albeit the reception of computerization caused the vast majority of the above expenses to be firmly connected with the use of machine as opposed to coordinate work hours. The examination showed that immediate work was still widely utilized as a designation base with the greater part of the respondents utilizing it. In any case, other allotment bases like standard machine hours, direct material, genuine machine hours, and units of creation were utilized too yet at somewhat lower and declining rates. Afterward, an examination by Garg et al. (2003) uncovered that customary MAP were still generally utilized in the US. Specifically, 76% U.S organizations involved full AC framework for computing the expense of their results, 75% utilized functional planning frameworks, and 70% involved direct work as a base for distributing the overheads to cost objects. The review showed additionally that new MAP were accessible however their reception was not high.

In Australia, Chenhall and Langfield-Smith (1998a) found that a scope of 30-80% manufacturing organizations in Australia utilized 13 principally progressed rehearses, the producer recognized as low took on bunch and the costing frameworks were remembered for the last gathering with the accompanying rates: AC 80%, variable costing 76%, and ABC framework 56%. Notwithstanding,

the analysts expressed that the aftereffect of ABC reception is as yet higher than whatever was accounted for in past examinations. Lukka and Granlund (1996) overviewed the condition of cost AC frameworks in Finland. According to the investigation, 31% of the large and medium-sized manufacturing facilities used full adsorption costing frameworks, and 27% combined the use of variable and full AC. Finally, the analysis revealed that cycle costing and job request were the most popular item costing techniques, with nearly equal frequencies of 30% and 32%, respectively. The experts concluded that the history of complete cost accounting was influenced by German (full costing) influence in the 1920s, American (variable costing) influence in the 1950s, and finally by the rise of ABC, which shifted the general conversation back towards full AC frameworks.

In Norway, Bjornenak (1997b) studied the expense accounting frameworks and tracked down that the greater part (93%) utilized both the retention and variable costing frameworks. As far as the intricacy level of the previous, the examination showed that 33% of the client organizations utilized a solitary above portion base, one more third utilized two unique kinds of distribution bases, and the last third utilized multiple designation bases. Furthermore, the most accepted allocation bases utilized by the organizations were the quantity of units created (40%), direct work costs (37%), machine hours (29%), direct work hours (28%), and direct work costs (26%).

Drury and Tayles had led one more concentrate in 2000 in UK to analyzed the precision of cost accounting frameworks and the contingent elements impacting their plan through studying the quantity of both expense pools and second stage cost drivers utilized for doling out above expenses to cost objects. The discoveries showed an exceptionally low use (3% of 169 responding organizations) of the most oversimplified costing framework for example a solitary expense pool and cost driver, 12% utilized from 2 to 5 expense pools, 49% utilized from 6 to 20 expense pools, 22% utilized from 21 to 50 expense pools, lastly 14% utilized in excess of 50 expense pools.

Adler et al. (2000) inspected the degree to which New Zealand companies take on traditional and additionally progressed MA practice. Concerning cost AC practice, the outcome showed that the AC framework was the most utilized among 57% of the answered organizations and this was trailed by the variable (direct) costing with 38.8%. In addition, 19.4% of the organizations (primarily enormous size) utilized the ABC framework and 20.6% expressed thinking about its

reception. While a portion of the organizations utilized numerous costing frameworks e.g., full and variable costing together. Afterward, Lamminmaki and Drury (2001) found that 52% New Zealand producing organizations utilized an extensive overheads rate and 48% of the organizations utilized numerous different distribution bases (for every division and each middle inside the division) for relegating the above expenses for the cost objects. Within Poland According to a review conducted by Szychta (2002), the majority of responding organizations (75%) used the standard full costing framework to determine the cost of their goods and services, while 15% also combined the direct (minor) and AC frameworks. The remaining 10% used a standard costing framework. Regarding the success of full costing, the research revealed that while the remaining (76%) clients used a variety of rates, such as machine hours, standard energy use, and amount of goods sold, only 24% of them used just one overheads designation rate (direct work).. Notwithstanding, the immediate work rate was the most utilized allotment rate by 69% of the clients. The investigation showed that the typical level of backhanded costs was 33.5%, which was moderately high and legitimizes utilizing the full costing framework by most of companies.

Like cost accounting concentrates on in western nations, Haldma and Laats (2002) directed a concentrate in Estonia, to notice the condition of cost and MA rehearses utilized in manufacturing organizations and to recognize the inside and outer contingent factors fundamentally impacting the execution of these practice. The exploration showed that the answering organizations utilized full AC (54.8%), variable costing (38.7%) and a mix of both of these frameworks (6.5%) individually for computing the expense of creation units. In regard of the item costing strategies, the discoveries uncovered that the partaking organizations utilized process costing (51.3%), work request costing (33.7%) and again a mix of both the techniques (15%). Just 7% pronounced utilizing the ABC framework. At last the creators showed that in Estonia, direct work costs (42%), deals volume (38%), direct work hours (28%), direct materials (26%), machine-hours (16%) and the quantity of working cycles (8%) were utilized as the cost distribution bases. Green et al. (2005) figured out that in the UK, the old methods are as yet popular at the same time with the contemporary procedures. The creators remarked that practically every one of the procedures created since the late 19th centuries, are still being used by UK producing organizations. However the vigorously censured standard costing, Ingestion costing, and minimal costing are intensely condemned, the old strategies are as yet being worked on including these.

However, Alnamri (1993) explored the distinctions and similitudes, as far as the complexity level of MA rehearses utilized between Saudi claimed firms and joint endeavors situated in Saudi Arabia. Among the reviewed MAP were the sorts of costing frameworks being utilized. The review showed that main four of the respondents (18 companies/firms) pronounced utilizing variable costing (three of them were joint endeavor organizations) while the rest prompted utilizing full AC frameworks. Concerning last frameworks, three of the Saudi possessed firms detailed utilizing a solitary distribution rate, which was ready by modern designers. Nonetheless, there was proof about utilizing the immediate work base, however it was utilized alongside other distribution bases, for example, machine hours, designing hours, rates per ton, and rates per barrel. At last, the analyst connected between the inescapable use of full costing and the announced elevated degree of above rate contrasting with all out organization costs. The review showed that on typical the expense structure was as per the following: 61% material, 11% direct work, and 28% above costs.

One more assessment of the MAP utilized in Saudi Arabia was directed by El-Ebaishi et al. (2003) who studied a large number of MAP utilized including contemporary practice. The noticed CAP were the allotment of administration division costs, assignment of above expenses, and ABC. The investigation discovered that among 121 medium and huge estimated Saudi manufacturing companies, 59% of these organizations affirmed distributing the expense of their administration divisions, where rest of the organizations not dispensing their administration office costs demonstrated that they were thinking about the execution of such an action. As to practice of above cost portion, the larger part (71%) of respondents showed allotting overheads to their expense objects while the rest (29%) didn't do as such. At last, concerning the execution of an ABC framework, the outcome showed 28% of the respondents asserted utilizing the ABC framework.

Hutaibat (2005) saw that occupation costing was the most involved practice by 57.1% of the answered organizations in Jordan. This was trailed by the cycle costing framework with 50.4%, lastly by group costing frameworks with 27.8% (a few organizations utilized double methods).In instance of the portion of overheads to cost protests, the larger part (61%) utilized an oversimplified technique for example the cover above base, 23% utilized cost community bases, and 16% utilized a departmental base. At long last, in regard of the designation rates utilized for overheads task, the examination uncovered that the quantity of units created (75.9%), direct material expense (28.6%), direct machine hours (15.8%) lastly direct work hours/cost (12.8%) the

answered organizations utilizing it frequently or consistently. Later, Joshi et al. (2011) found that the reception pace of cost administration as one of the reviewed MA was by and large low among the openly possessed recorded organizations 10 of the Gulf Cooperation Council. Asechemie and Ikeri (1999) observed that only 13 out of 150 producers in Nigeria indicated that they maintained some sort of costing record. Nearly half of the respondents (74 respondents) acknowledged the above costs when costing their items, but all respondents distinguished material and labor as components of result cost. The respondents recognized fixed and variable costs and viewed the first as item-determined costs while viewing the last as limit-driven costs. In terms of costing strategies and methods, respondents reported using work costing the most (49.3%), followed by clump costing (21.3%). The minimal costing (variable costing) framework was also the most widely acknowledged, at 53.3%, and the air conditioner framework was the next most frequently used, at 24%. Finally, the researchers deduced that the respondents engaged in a significant amount of casual but noticeable cost AC rehearsals. Nimtrakoon (2009) observed that there was a ―relatively restricted reception level of contemporary costing frameworks in Thailand. Investigating the information gathered from 135 surveys showed that the air conditioner framework was from the gathering of exceptionally taken on (84%) MAP while the variable was costing framework were perceived as having a lower reception rate (76%) of the answered organizations. At long last, it is worth to specify that the outcome about the reception of ABC framework was as opposed to the respondents 'scores about its helpfulness, which sorted it as a high-benefit practice.

6.4.2 Budgeting Practice

In almost all organizations, budgeting is regarded as a crucial control system (Hansen & Van der Stede, 2004). The adoption rates and motivations for budgeting have received the majority of attention. The utilization of spending plans can be followed back north of 100 years (Jones et al., 2012) with an emphasis on supporting preparation. Boyns (1998) graphs the turn of events and utilization of spending plans showing their utilization in the UK in focal government as far back as the 1800's. Boyns perceives crafted by Solomons (1952) which shows that constantly 50% of the twentieth century planning started to serve various capabilities inside the UK recommending it would “aid systematic planning, or it may aid the delegation of authority, by fixing limits up to

which subordinates may be allowed to spend." Solomons (1952) also observed firms integrating budgets with their cost records to exercise control over expenditure.

The meaning of a budget plan has developed over the long run and most scholastics currently settle on a generally standard definition which sums up a financial plan as a quantifiable arrangement (Collier, 2012). The spending plans ready in associations will for the most part originate from the need to deliver an expert spending plan containing a planned pay explanation, planned proclamation of monetary position, and planned income proclamation. Taking care of the expert spending plan will be various other monetary and non-monetary spending plans which will contain detail of the associations functional and asset needs for the approaching time frame (Bhimani et al, 2012). In the extensive variety of planning, the accompanying practice are having a place with planning: Arranging purposes planning, planning for controlling expense, vital preparation, Adaptable planning, Activity based budgeting (ABB) and Zero-based planning. However, ABB has been characterized by Ayvaz and Pehlivanli (2011) as "the budgeting of sources according to target activities." The utilization of this kind of planning framework is not difficult to use, as it centers on the exercises inside the interaction instead of cost objects. The ABB provides us with a valid and exact image of the expense portions in the association.

In forty large and medium-sized organizations in the UK, Dugdale and Lyne (2004) investigated how financial plans were used on a continuing basis. This analysis revealed that every respondent agreed that their companies set spending goals, with conversations typically starting four to six months before the start of the fiscal year. About 80% agreed that adjustments were made to the spending plan on a regular basis during the budgeting process. Szychta (2002), who led a focus on clean businesses, observed that a significant portion of the organizations examined, primarily sizable assembling and management undertakings (80% of the respondents), prepare annual working financial spending plans. Nonetheless, a total or almost complete expert financial plan is ready by a lot more modest extent of ventures (17%). The leftover endeavors get ready shifting quantities of part financial plans, basically deals, creation and cost financial plans. Joshi et al. (2003) uncovered that the majority of the Bahrain organizations studied arranged long-range designs and working operating budgets.

Budgeting is viewed as a critical control system in basically all affiliations. The basic focus on planning/arranging has been on take-up rates and the reasons stowed away its use. Planning is viewed as a critical control structure in basically all affiliations (Hansen and Van der Stede, 2004). Financial plans permit the foundation of goals and guidelines as well as correlations of the genuine outcomes with the laid out norms. (Blumentritt, 2006). Past exploration demonstrates that the principal motivations behind planning will be arranging future execution; arranging the future monetary position; arranging future incomes; arranging future everyday activities; and controlling costs (Abdel-Kader and Luther, 2006).

A review conveyed by Abdel-Kader and Luther (2006) shows that budgeting is either frequently or regularly utilized for arranging and for controlling expenses (84% and 73% separately) by the food sources and savors industry the UK. Taken together, budgeting for arranging and control was thought of as either significant or reasonably significant by over 90% of respondents. It very well may be presumed that practically all organizations use budgeting for arranging and control in UK. At last, 83% evaluated planning as a significant piece of their drawn out essential preparation. Shamsi (2018) found that budgeting was broadly utilized for arranging, controlling expenses, and for long haul vital preparation by Jordanian assembling organizations and it appears to be that planning is more helpful and significant when contrasted with costing.84% and 78% of the organizations either utilized “often’ or “very often”planning for arranging and controlling expenses, individually. It was thought about by the same token “important” or “moderately important” by over 93% and 95% of the respondents. Likewise, 90% of the respondents evaluated budgeting as a significant instrument for long haul vital preparation. In this manner, it tends to be presumed that most of the organizations utilized planning for arranging, controlling, and long haul key preparation.

Gichaaga (2014) figured out that planning rehearses were exceptionally utilized (4.27) by the assembling organizations in Kenya where 90.8% of the organizations frequently use budgeting for long haul (well thought out courses of action, 87.4% of the organizations frequently utilize Zero-based budgeting, 85.2% of the organizations frequently use planning for controlling expenses, 84.0% of the organizations frequently utilize adaptable planning, 82.8% of the organizations frequently use planning with “what if analysis”, 82.2% of the organizations frequently use planning for arranging while 81.6% of the organizations frequently use ABBby the manufacturing

firms. Activity-based budgeting, budgeting with "what if analysis," and flexible budgeting were all found by Shamsi (2018) to be either "important" or "moderately important" by Jordanian manufacturing companies, but only 20%, 21%, and 32% of the time, respectively. The other budgeting practice had low mean scores showing that these practice were not habitually involved by these assembling organizations in Jordan. At last, zero-based planning is neither seen to be significant (10%) nor frequently utilized (17%). These outcomes are predictable with past MAP discoveries. For instance, Abdel-Kader and Luther (2006) revealed a 16 percent take-up in the UK; Szychta (2002) found 17 percent in Poland and a concentrate by Joshi (2001) showed just 5% reception in India. Proof on rolling planning is restricted to Hansen and Van der Stede (2004) who found that 23% of U.S organizations were utilizing moving financial plans. Other than these, the utilization financial plan and the benefit spending plan are likewise worries by ventures. Ahmad et al. (2003) observed that the take-up of adaptable financial plans in Malaysia is higher contrasted with those in UK and New Zealand. The reasonably low results moreover were by several examinations (Szychta, 2002; and Abdel-Kader and Luther, 2006). Szychta (2002) recommended that the reasons of low gathering include: by and large no significant change in action in no less than a year; volumes don't move that fundamentally; and too hard to even consider answering to non-financial divisions.

Renzio and Wehner (2015) gave that budgeting is one of the devices to assess chief's presentation. In light of the arranging hypothesis, director's support in the planning system is accepted to emphatically affect further developing proficiency (Renzio and Wehner, 2015). Adu-Gyamfi et al. (2020) found that planning was viewed as a measurably huge indicator and is such the most prescient power and thusly profoundly delicate to hierarchical execution. The review done by found that budgeting framework has the most grounded coefficient (β: 1.373; p- value: 0.001) showing that one percent vertical in the degree of monetary control will influence hierarchical execution by 1.373 whiles a rate descending in the degree of monetary control will influence hierarchical execution any remaining things being equivalent. The outcome was upheld by the investigation of Gichaaga (2014), that in Kenya, a unit expansion in budgeting practice will prompt an expansion in monetary execution by 0.601 which means Planning rehearses decidedly impact organizational performance. Notwithstanding its broad use, budgeting has throughout the long term, been scrutinized on various grounds. Hansen et al. (2003) expressed that the specialists

contend that financial plans hinder the assignment of hierarchical assets to their best purposes and energize nearsighted navigation and other broken spending plan games. They credited these issues, to a limited extent, to conventional planning's monetary, hierarchical, order and control direction as implanted in yearly financial plan arranging and performance assessment processes. Bourne (2004) embraced an overall survey of planning. The review results showed a far reaching disappointment with the planning system. The index of grumblings was reliable with past exploration: the interaction was too tedious, excessively performance, excessively misshaped by gaming, too cantered around cost control, etc. Most essentially, budgeting frequently appeared to be completely separated from the organization's in general essential course.

Anyway as verified above, regardless of the multitude of shortcomings in conventional budgeting, most of scientists have observed that the utilization of customary budgeting is as yet pervasive. For instance, Hansen et al. (2003) guaranteed that by far most of U.S. firms hold a formal planning process notwithstanding considerable rundown of issues and many calls for development in budgeting. Additionally, Dugdale and Lyne (2004) found that planning/budgeting is perfectly healthy. They presumed that while customary planning is currently bound to be joined with expanded utilization of non-monetary markers, its destruction appears to be improbable.

6.4.3 Performance Evaluation

Performance is anticipated through management accounting, where performance appraisal is an important concern, to assess whether management's choices are both valuable and moral (Scarlett, 2005). Generally, performance measures have been inner, total measurements of FP (Chenhall and Langfield-Smith, 2007). Notwithstanding, the pertinence of this action has been tested in the ongoing industry climate. Contest has constrained firms to execute the management techniques and frameworks to defeat disappointment with customary momentary viewpoint monetary estimation frameworks (Said et al., 2003). Consequently, as of late associations have tried to foster

more exhaustive PMS to furnish administrators and representatives with data to help with dealing with their company's tasks (Lobby, 2008). The BSC way to deal with the executives (Kaplan and Norton, 1996) has acquired unmistakable quality in MAP as an approach to coordinating monetary and nonfinancial performance measures (Hoque and James, 2000). The execution of BSC and its effect on execution was examined by Jusoh et al. (2008). There has been an expanded authoritative utilization of non-monetary/ nonfinancial measures for performance assessments as of late (Hoque, 2004).

Though Ittner & Larcker (1998) stated that due to performance evaluation, manufacturing organizations are constantly encountering challenges in today's business environment but further criticized performance evaluation as these focused entirely on financial components only, such as maximizing profits and return on capital investment projects. They have additionally contended that the readiness of monetary bookkeeping data has been controlled because of outer revealing shows. These shows don't consider the expense of raising capital and work turnover. These weaknesses in execution assessment have made associations make the Economic Valued Added (EVA) system. The EVA instrument is characterized by Ittner and Larcker (1998), as taking a gander at the genuine worth that has been added to the organization and its expense of capital (for instance, stakeholders‟ speculation). It investigates the net working benefit after charges from additionally a financial point of view instead of just a bookkeeping one. Chen and Dodd (1997) expressed that EVA is the contrast between an organization's net working pay after charges and its expense of capital of both value and obligation. The EVA strategy hasn't been well received by organizations, but it could be considered an important tool for evaluating execution appraisal in the future. Determining the weighted normal expense of capital, this can occasionally be risky, results in a significant deficiency. The equilibrium scorecard was proposed by Kaplan and Norton (1992) as a tool for estimating execution and managing the financial and non-financial aspects of the organization. The scorecard's main purpose is to collect a variety of data that the executives can use to inform their key preparation motivations. When this type of management framework is used, it enables the association to keep its focus on the organization's goals. Abdel-Kader and Luther (2006) found that most of food and beverages organizations (78%) in UK appraised financial measures as significant and about a similar rate detailed successive use of these actions. Anyway non-financial measures connected with clients and to tasks and advancements are plainly

extremely compelling with 87% (42% + 45%) and 77% separately scoring them as modestly significant. The pre-prominence of client related non-monetary execution measures affirms the finding of Abdel-Maksoud et al (2004); and the significance, for food related organizations, of execution in store network the executives and item advancement/separation upholds the discoveries of Rudder et al. (2001), Riley (2005), Grunert et al. (2005), Henchion and McIntyre (2005). Be that as it may, a huge minority of organizations (38% for the two classes of measures) produce such measures either never or seldom. Also, the review added that neither EVA nor benchmarking has yet acquired prominence regardless of the Benchmarking.

Shamsi (2018) saw that most of Jordanian Assembling organizations announced by the same token often or very often utilization of monetary measures (79%) and 96% of respondents recognized it as by the same token "important" or "moderately important." Two non-financial measures connected with clients and to tasks were obviously powerful with 93% and 80% of respondents rating them as by the same token "important" or "moderately important" and were utilized every now and again (52% and half) by organizations. Additionally, The non-monetary measure connected with workers was thought of as significant (63%) yet not regularly utilized (3%) and the financial worth added and benchmarking were neither seen to be significant (6% and 8%, separately) nor frequently utilized (8% and 7%) by the organizations. At last, the review added that in Jordan, financial measures (4.20), nonfinancial measures connected with clients (3.07), and non-financial/monetary measures connected with activity and development (3.05) were broadly utilized by 79%, 52%, and half, separately which show that administration bookkeepers ought to report all applicable data which incorporates both monetary and non-monetary parts connected with the assessment of the exhibition of assembling organizations. These outcomes are reliable with past MAP discoveries which considered both monetary and non-monetary data as significant devices for assessing the exhibition of an association (Ittner et al., 1997; Ittner and Larcker, 1998; Kaplan and Norton, 1992; Abdel-Kader and Luther, 2006). Zuriekat and Alrawashdeh (2011) found that in Jordan, fabricating organizations benefit from performance estimation frameworks that consolidate an extensive variety of financial and non-financial performance measures where monetary measures are the main class used to assess management execution, reward supervisors and to recognize issues and improvement valuable open doors and creating activity plans. As far as non-financial performance gauges, the outcomes show that the client measures are the main

non-financial measures that are essentially used to assess administrative execution, reward supervisors and recognize issues and improvement potential open doors and foster activity plans. The outcomes additionally show that by and large, functional, advancement and quality will generally be modestly used to assess administrative execution, reward supervisors and distinguish issues and improvement open doors and foster activity plans. At long last, provider and representative execution measures tend not to be utilized widely in the MAP by Jordanian manufacturing organizations. Once more, Gichaaga (2014) found that Presentation assessment measures as profoundly utilized in MAP (4.22) in Kenya, where 88.0% of the Organizations frequently utilize nonfinancial measure(s) connected with clients, 87.0% of the Organizations frequently utilize non-monetary measures(s) connected with activity and advancement, 86.0% of the Organizations frequently utilize nonfinancial measure(s) connected with representatives, 85.0% of the Organizations frequently utilize financial measures, 82.0% of the Organizations frequently utilize financial worth added or remaining pay while 80.0% of the Organizations frequently use benchmarks.

This study done by Ahmad and Zabri (2015) on "The Application of Non-Financial Performance Measurement in Malaysian Manufacturing Firms" investigated the specific extent of use by Malaysian manufacturing firms of a range of specific non-financial performance techniques. The review included an itemized reaction on the degree of purpose of 16 non-monetary performance estimates gathered under the four expansive headings for NFPMS (quality control, inward effectiveness, client and representative based measures). The outcomes show that on-time conveyance and consumer loyalty are the most generally utilized non-monetary/financial presentation estimates by Malaysian manufacturing firms. This finding proposes that the assembling firms, that utilization non-financial execution measures, are more inside interaction and client zeroed in as opposed to worker centered. The outcome is steady with discoveries by Abdel-Maksoud et al. (2005) and Ahmad and Mohamed Zabri (2012). The concentrate moreover added that there are basic and positive associations between the size of firms (in light of no. of workers and yearly deals turnover), proprietor/director contribution and current assembling innovation and the utilization of NFPMS. Inside the gathering of non-money related execution checks, those associated with clients have a higher gathering rate diverged from the other non-money related/monetary measures. Abdel-Maksoud et al. (2008) found that client related measures

are broadly revealed and are seen to be vital various different measures connected with quality, practicality and productivity and usage are likewise generally observed and considered vital. Different examinations have zeroed in on the BSC. Speckbacher (2003) showed that main a minority of German firms in his example (26%) utilized BSCs and the vast majority of these seemed to utilize just a restricted or deficient rendition. Ismail (2007) revealed that the BSC has far reaching use in the Egyptian organizations studied; however the degree of purpose of complex markers is low. The study gave various experiences into obstructions repressing the reception of the BSC in an emerging nation - the main hindrance being the deficiency of existing information system.

As per Bryant et al. (2004), when firms carry out a PMS that contains both monetary and non-monetary measures, they will help more than the organizations that depend exclusively on monetary measures. Specifically, they observed that there is a positive connection between monetary results and both consumer loyalty and new item presentations which holds just for firms that utilization both financial and non- financial measures in their exhibition. Gichaaga (2014) found that a unit expansion in Execution Assessment practice will prompt an expansion in monetary execution by a component of 0.599. This is upheld by the review conveyed by Adu-Gyamfi, Yusheng and Chipwere (2020). The outcome observed that the coefficient for the monetary performance assessment strategy is 0.433 with a P-Worth of 0.065 which suggests that an improvement in the degree of applying the financial performance (FP) valuation method will create an extra 0.433 expansion in the hierarchical execution of the assembling organizations in Ghana. Then again, should the degree of use of the FP assessment strategy be limited or not applied, authoritative execution will likewise diminish yet by 0.433. Said et al. (2003) examined the current and future performance outcomes of consolidating non-financial measures with reference to a variety of performance measurements among U.S. organizations using a broader scope of non-financial measures. They showed that the use of non-monetary measures in evaluating FP had significantly impacted market performance when viewed in the context of execution estimated as accounting-based measures ROA and market-based measures. According to Jusoh et al. (2008), who looked at the extent to which different performance estimates were used and their effects on the presentation of Malaysian producers, the use of non-monetary/financial

measures, particularly the internal business cycle and the BSC's growth and education viewpoints has been improved firm performance.

6.4.4 Information for Pricing and Decision Making

By and large, there is an insight about MA that its data furnishes supervisors with powerful navigation. There are various apparatuses for dynamic which are item benefit examination, cost volume benefit, and so on. Cost volume benefit (CVP) remembers the possible change for the incomes, expenses and costs of the organization (Horngren et al., 2009). Dynamic practice include benefit analysis of the product, analysis of the initial investment or CVP, incomes, time value of money and compensation period, analysis of the client's productivity, analysis of likelihood, and non-financial independent direction. According to Wu et al. (2010), effective navigation is the primary factor in calculating the current volatile and competitive environment. One can divide the choice help investigation into short-term and long-term analyses.

The utilization of CVP estimation is wide in range by the manufacturing organizations. The MA gives valuable data to the organizations to pursue choices in which CVP, restitution period and accounting pace of return are generally utilized. However, the expense of capital regularly isn't generally utilized (LeBurto et al., 1997). One of the vital targets of the MA is to give data to dynamic inside the association. The organizations might take customary choices or financial independent direction as per the important data of the MA devices, for example, equal the initial investment investigation, and benefit examination of the item, productivity examination about clients and command over stock and so on. The organizations take vital choices or long haul dynamic by following the instruments of the MA which are return on compensation period, limiting of incomes and likelihood investigation can be utilized by the organizations (Abdel-Kader & Luther 2006).

There is an overall insight that MA gives important data to deciding, both inside and remotely and on a long haul or momentary premise. There are a wide range of instruments for pursuing momentary choices, for example, cost volume benefit (CVP) investigation, and client productivity examination. Horngren et al. (2009) described cost volume benefit assessment as a system or gadget for assessing anticipated changes in the association's wages, costs and expenses. CVP

assessment is used in assembling associations to conclude the quantity of units of a particular thing that ought to be proposed to procure back the first venture. The usage of this rule is for the most part straight forward with the unit selling cost being deducted from the variable cost per unit to appear at the responsibility edge. The all out fixed cost is then partitioned by the commitment edge to show up at the quantity of earn back the original investment units required. Subsequently, this permits supervisors to see the way of behaving of the expense preceding committing to a strong responsibility or ultimate choice on a particular request. CVP examination may likewise be utilized by chiefs while considering in the event that an item ought to be purchased or made. LeBruto et al. (1997) focused on that cost volume benefit examination seems, by all accounts, to be training that is emphatically involved by manufacturing organizations in the food business. The MA can likewise deliver valuable data to pursue managerial choices like restitution periods, accounting pace of return and limited income techniques. Most organizations utilized the famous approach to estimating profit from venture by utilizing the accounting pace of return to ascertain the incomes on significant capital activities. Nonetheless, the utilization of limited incomes and inner pace of return strategies to compute the expense of capital appears to be not to be an ordinary MAP utilized by organizations.

In management accounting, decision-making strategy may just be characterized as choosing a blueprint from a bunch of choices (Guilding, 2000). Wu et al. (2007), hold that successful direction is the main key figure the present quick and changing cutthroat situation. The choice help investigation can be isolated into the present moment and long haul examination. Up to 1970, the MA was utilized to give applicable data to interior navigation. The accountant can CVP examination, item productivity investigation, client benefit examination, and stock control models for customary or transient choices though for capital speculation choices, accounting paces of return and restitution periods, as well as additional mind boggling signals in view of limited income, were utilized. Additionally, data on non-monetary variables, for example, nature of result, the adaptability of cycles and lead times could influence capital venture projects. At long last, risk investigation strategies, for example, programmatic experience and 'consider the possibility that' analysis can be utilized.

In their review, Abdel-Kader and Luther (2006) observed that item benefit examination and client productivity investigation are frequently or regularly determined in most of organizations (69%

and 51% separately) as well as significant (72% and 59% individually). CVP examination supposedly is significant or respectably significant (86%) and respondent are utilized such investigations somewhere around frequently (44%). Stock control models are generally reasonably significant and once in a while utilized. As to venture choices, 41% of respondents utilized traditional accounting measures like accounting pace of return and recompense period to assess significant capital tasks, while the same figure for limited income models, for example, inward pace of return and net present worth is just 19 %. Appropriately, the figure of 42% addressed that ascertaining the expense of capital (42%) was not significant by the respondent. Also, while non-monetary elements connecting with capital tasks are seen to be either significant or modestly significant by 82% of respondents, just 33% of organizations frequently or all the time report and record such factors. At long last "what if" analysis is the most well known method in assessing the gamble of ventures however just 22% of respondents utilized it often or very often.

A similar investigation of the Netherlands and China, Hermes et al. (2006) express that looks at the utilization of capital planning methods of Dutch and Chinese firms, utilizing information got from 42 Dutch and 45 Chinese firms. The review examines the utilization of capital planning procedures by organizations in the two nations according to a similar viewpoint to see whether financial improvement matters. The observational investigation gives proof that Dutch CFOs utilize the NPV technique fundamentally more frequently where Chinese CFOs utilize the ARR strategy essentially more than Dutch CFOs do. In addition, CFOs of Chinese organizations less frequently make cost of value assessments when contrasted with Dutch CFOs. Simultaneously, in any case, the investigation additionally discovers that the utilization of the IRR strategy doesn't appear to vary altogether among Dutch and Chinese firms. The equivalent is valid for the assessment of the expense of capital and the utilization of CAPM as a strategy for assessing the expense of value. The discoveries show that Dutch CFOs on normal utilize more complex capital planning methods than Chinese CFOs do. These outcomes might be made sense of by the way that there is as yet a hole concerning the degree of monetary, monetary, human and innovative improvement between the two nations. Gichaaga (2014) saw that data for dynamic practice as exceptionally utilized MAP in Kenya. In Kenya, 89.4% of the organizations frequently use Assessment of significant capital venture in light of limited income method(s), 89.0% of the companies frequently use For the assessment of significant capital speculations, non-financial

perspectives are archived and announced, 88.2% of the organizations frequently use computation and utilization of cost of capital in limiting income for significant capital venture assessment, 88.0% of the organizations/ companies frequently use client benefit, 87.2% of the organizations frequently use item productivity examination, 86.8% of the organizations frequently use Assessment of significant capital speculations in view of compensation period and additionally accounting pace of return, 86.2% of the organizations frequently use assessing the gamble of significant capital speculation projects by utilizing productivity investigation or virtual experience, 85.6% of the organizations frequently utilize Stock control models, 84.8% of the organizations frequently use performing responsiveness while assessing significant capital speculations projects while 83.2% of the organizations frequently utilize cost-volume-profit investigation (make back the initial investment) for significant items. Gyamfi et al. (2020) center the effect of information for decision making practice on association's presentation. The outcome shows that a unit expansion in decision making will prompt an expansion in execution by a variable of 0.264 with a p-component of 0. 0207). These discoveries represent that data for direction altogether affects execution of assembling firms in Ghana however not that much as contrast with different variables.

6.4.5 Strategic Management Analysis

Smith (2007) who checked on past studies in Australia presumed that SMA methods has not been taken on broadly, nor is the term SMA generally comprehended or utilized. Notwithstanding, SMA has impacted the reasoning and language of business, and the manner by which organizations attempt different business processes. Afterward, Muogbo US (2013) analyzed the effect of key administration on hierarchical development and improvement in chose manufacturing firms in Nigeria. The review figured out that Essential administration was not yet a typical business practice among manufacturing firms in Nigeria. Ojua (2016) concentrated on the degree of use of strategic MAP (SMAP) by nearby Nigerian manufacturing ventures in the creation of compelling choices by business administrators and bookkeepers as well as the hindrances militating against its reception, given its many advantages in cutting edge economies where its application is consistent. The review reasoned that there is no huge connection between the reception of SMAP and dynamic framework by native Nigerian manufacturing ventures. The outcomes show that the reception pace of SMAP among Nigerian manufacturing endeavors isn't just low, yet information about its instruments and significance isn't valued. Also, the orderly advantages accruable to different

ventures that embraced the standard are missing in endeavors explored. Cadez and Guilding (2012) analyzed the impact of strategic decisions, market direction, and company size on two unmistakable components of SMA and, thus, the intervening impact of SMA on organization's performance. They progressed a model and tried it utilizing primary condition displaying and utilizing the information gathered from an example of 193 huge Slovenian organizations. The legitimacy of the quantitative information discoveries was evaluated utilizing subjective information gathered in ten exploratory meetings. The review discoveries support possibility hypothesis' fundamental of no all around fitting SMA framework. Consequently, this is with elements, for example, organization size and system which have a huge bearing on the fruitful utilization of SMA. Strategic Management Accounting (SMA) was investigated by Akinbor and Okoye (2012) in order to ascertain how much it affects Competitive Advantage in Nigeria's manufacturing sector. Their research showed that, despite a number of obstacles, strategic management accounting improves competitive advantage in Nigerian manufacturing firms.

6.5 Empirical Results and Discussion

6.5.1 Research Methodology

As stated in chapter 4, the study is predicated on the findings of a structured questionnaire survey. Various descriptive and inferential statistical methods are applied according to the study's goals. The mean and standard deviations are descriptive tools that are used to determine which strategies are most frequently used. A data reduction method called principal component analysis (PCA), together with Cronbach's Alpha, KMO, and Hotelling's T-Squared test, is utilised to find any hidden relationships between the procedures.

6.5.2 Extent Use of Costing Tools

In data analysis, the importance of reliability testing especially when using Cronbach's Alpha cannot be emphasised enough. The degree to which a measurement, or series of measurements, consistently yields the same results under consistent conditions is known as reliability (Bonett & Wright, 2015). Reliability testing is important since it helps to establish trust in the data's resilience. When using instruments or measurements to record events, researchers need to be confident that the data produced by these tools are reliable and correct every time (Sijtsma, 2009).

Table 6.1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.772	.796	19

Cronbach's Alpha based on standardised items in Table 6.1 is 0.796, and the reliability test yields a value of 0.772, both of which are satisfactory. When it comes to reliability assessments, Hotelling's T-Squared Test is very important, especially when dealing with multivariate data. Hotelling's T-Squared Test is significant because it offers a thorough method for assessing data reliability and a solid assessment of the statistical significance and reliability of these discrepancies.

Table 6.2: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
1030.384	44.605	18	60	.000

The Hotelling's T-Squared Test, which is significant at the 1% level, is displayed in Table 6.2. In statistical analyses, sampling adequacy is a crucial element to take into account. The Kaiser-Meyer-Olkin (KMO) test, in conjunction with Bartlett's Test of Sphericity, is a useful tool for determining if data are suitable for more complex approaches such as factor analysis. These tests are essential for making sure the sample selected is appropriate for the intricacy of the statistical methods used. A measure of adequate sampling in factor analysis is the KMO test. It evaluates the percentage of variance in variables that could be attributed to underlying causes. The sample may be used for factor analysis if the KMO value is high closer to 1.0 (Purwono et al., 2023).

Table 6.3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.704
Bartlett's Test of Sphericity	Approx. Chi-Square	487.680
	Df	171
	Sig.	.000

Table 6.3 displays an acceptable KMO value of 0.704, indicating a sufficient sample size. To ensure the robustness and reliability of factor analysis, it is imperative to evaluate sampling adequacy using the KMO test and Bartlett's Test of Sphericity. By enabling researchers to make well-informed decisions regarding the acceptability of their data for intricate statistical methods, these tests eventually enhance the validity and reliability of the study's conclusions.

Table 6.4: Principal Component Analysis

	Initial	Extraction
ACS_1	1	.615
ACS_2	1	.757
ACS_3	1	.607
ACS_4	1	.582
ACS_5	1	.690
ACS_6	1	.726
ACS_7	1	.652
ACS_8	1	.448
ACS_18	1	.481
ACS_19	1	.564
ACS_20	1	.750
ACS_21	1	.747
ACS_22	1	.641
ACS_23	1	.641
ACS_24	1	.675
ACS_25	1	.588
ACS_26	1	.782
ACS_27	1	.779
ACS_28	1	.594

Principal Component Analysis (PCA) is a robust statistical method that finds extensive use in many fields, such as pattern identification, dimensionality reduction, and data analysis (Wiputra et al., 2023). Principal Component Analysis (PCA) is a commonly employed statistical method in data analysis and machine learning due to its several compelling advantages: PCA is commonly employed to decrease the number of variables in a dataset while preserving a significant amount of variance. Visualising and analysing high-dimensional data can be challenging, but Principal Component Analysis (PCA) can simplify the dataset without sacrificing important information. PCA simplifies the dataset by reducing it to only two or three main components. This allows for the creation of scatter plots and other visualisations that can uncover patterns, clusters, and correlations in the data that may not be readily apparent in higher dimensions. Several machine learning methods, including clustering, regression, and classification, can achieve improved performance by utilising a smaller collection of variables that are not associated with each other. It converts the variables that are related to each other into a group of components that are not related to each other in a linear way. This can make the process of creating models simpler and enhance the reliability of predictive models. Table 6.4 shows the Principal Component Analysis where the extracted values of components are greater than 0.40 which is indicate no inconsistency in the selected factors. Based on the PCA value we have retracted some constrict due to lower level of extracted value, those are not suitable to estimate the desired structural equation model.

6.5.2.1 Usage of Costing Tools of Management Accounting Practice in Respondents Company

This section investigated the extent use of MAP in manufacturing industries in Bangladesh. Participants were requested to specify their level of agreement with statements regarding the utilization of strategic management accounting practice in their company. The responses were rated on a five-point Likert scale from 1 (never) to 5 (very often). A mean score exceeding 3 is considered indicative of satisfaction with the test variables. Standard deviation is a measure of the dispersion or variability from the mean. A low standard deviation signifies data points clustering closely around the mean, while a high standard deviation suggests data spread out throughout a wide range of values. The findings of the uses of costing tools are displayed in the Tables below.

Table 6.5: Descriptive Statistics of Usage of Traditional Costing in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ACS_1	Department or multiple plant-wide overhead rates	78	1.00	5.00	3.8205	.83345
ACS_2	Separation of variable and Fixed cost	78	1.00	5.00	4.0513	.68181
ACS_3	Job order costing	78	1.00	5.00	2.8846	1.40482
ACS_4	Batch costing	78	1.00	5.00	3.0256	1.57887
ACS_5	Process costing	78	1.00	5.00	3.6538	1.28757
ACS_6	Absorption Costing/ Full cost accounting	78	1.00	5.00	3.8974	.97488
ACS_7	Standard costing	78	1.00	5.00	2.5256	1.33606
ACS_8	Variable/ Marginal costing	78	1.00	5.00	1.8077	1.17393
				Overall Mean Value	3.2046	

Table 6.5 shows that, tools of traditional costing have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools ACS_2 (Separation of variable and Fixed cost). ACS_2 has the highest value of mean 4.0513 and the second largest tools that have been used in traditional costing is ACS_6 (Absorption Costing/ Full cost accounting) and it has second highest mean value 3.8974. The other popular traditional costing are Department or multiple plant-wide overhead rates (3.8205), Process costing (3.6538) and Batch costing (3.0256). Traditional costing involves dividing expenses according to a single cost driver, which is frequently volume-based metrics like direct labour hours or machine hours (Sharma & Ratnatunga, 1997). This method is predicated on the idea that these drivers are the main things affecting expenses. In the traditional costing model, indirect costs are distributed according to preset rates, while direct costs are directly linked to products (Saleh et al., 2023).

Table 6.6: Descriptive Statistics of Usage of Contemporary Costing in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation

ACS_18	Activity based Costing (ABC)	78	1.00	5.00	2.7692	1.28854
ACS_19	Throughput Costing	78	1.00	5.00	2.0385	1.22148
				Overall Mean Value	2.4035	

From Table 6.6, the manufacturing industry has been used contemporary costing method and it has priority to use the costing tools Activity based Costing (ABC) (2.7692), Target Costing (2.0641) and Throughput Costing (2.0385) in term of uses of contemporary costing. Here, contemporary costing system practice by the industry but it has no significant impact because the mean values of all the contemporary costing tools are less than benchmark category 3.00. However, Table 6.7, the company has priority to use the target costing (ACS_20) in term of strategic costing since the highest mean value among the used tools. Overall measure of the second highest usage of strategic costing tools of management accounting practice in Respondents Company is ACS_28 (Life Cycle Costing) because it has estimate second highest mean value 2.0385 among the tools that have been used but all the tools have mean value less than benchmark 3.00.

Table 6.7: Descriptive Statistics of Usage of Strategic Costing in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ACS_20	Target Costing	78	1.00	5.00	2.0641	1.24149
ACS_21	Life Cycle Costing	78	1.00	5.00	2.0385	1.15593
ACS_23	Value Chain Costing	78	1.00	5.00	1.4744	.75118
ACS_24	Back-Flush costing	78	1.00	5.00	1.7308	.97599
ACS_25	Quality Costing	78	1.00	4.00	1.7564	.88547
				Overall Mean Value	1.801	

In conclusion, the overall mean value of traditional costing is 3.2046, contemporary costing is 2.1361 and mean value of strategic costing is 1.801. The highest mean value gained by traditional

costing, that is why we may made decision that, uses of traditional costing is greater than any others costing tools and methods.

6.5.3 Extent Use of Budgeting Tools

In this section, reliability statistics by Cronbach's Alpha, KMO and Bartlett's test and principal component analysis are show the strength, validation and reliability of data set in terms of budgeting tools.

Table 6.8: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.840	.845	10

However, Cronbach's Alpha based on standardised items is 0.845, and the reliability test yields a value of 0.840, both of which are satisfactory in Table 6.8.

Table 6.9: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
459.424	45.743	9	69	.000

The Hotelling's T-Squared Test, which is significant at the 1% level, is displayed in Table 6.9. Table 6.10 displays an acceptable KMO value of 0.799, indicating a sufficient sample size.

Table 6.10: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.799
Bartlett's Test of Sphericity	Approx. Chi-Square	283.742
	Df	45
	Sig.	.000

Table 6.11: Principal Component Analysis

	Initial	Extraction
ABP_1	1	.625
ABP_2	1	.681
ABP_3	1	.704
ABP_4	1	.665
ABP_5	1	.801
ABP_6	1	.542
ABP_7	1	.604
ABP_8	1	.628
ABP_9	1	.693
ABP_10	1	.640

Table 6.11 shows the Principal Component Analysis where the extracted values of components are greater than 0.40 (1>0.40>0) which is indicate no inconsistency in the selected factors.

6.5.3.1 Usage of Budgeting Tools of Management Accounting Practice in Respondents Company

This study aims to present the status of several management accounting techniques in practice. Various methodologies were identified and a survey was undertaken to determine the extent to which these techniques are used to analyse the use of management accounting in Bangladesh. The foundation of financial management is budgeting, and over time, organisations' resource allocation and planning have been influenced by both traditional and modern budgeting techniques. Traditional budgeting takes a simple, conventional approach. It is also known as gradual or static budgeting (Nazarova et al., 2016). Descriptive statistics, including mean, standard deviation, maximum and lowest data values, can be derived from the input of respondents using a 5-point Likert scale. Uses of budgeting tools are considered as traditional budgeting tools in Table 6.12 and contemporary budgeting tools in Table 6.13.

Table 6.12: Descriptive Statistics of Usage of Traditional Budgeting in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ABP_1	Budgetary Control	78	1.00	5.00	3.7051	.94125
ABP_2	Budgeting for (short term) planning	78	1.00	5.00	3.9103	.79259
ABP_3	Budgeting for controlling cost	78	1.00	5.00	3.6154	1.03486
ABP_4	Master budgets	78	1.00	5.00	3.8846	.96673
ABP_5	Flexible budget	78	1.00	5.00	3.1923	1.08182
ABP_6	Budgeting for long term(strategic) plans	78	1.00	5.00	1.9872	1.23260
	Overall Mean Value				3.3791	

Table 6.12 is present that the traditional budgeting tools that are used by the participants from the industries were requested to specify their level of agreement with statements regarding the utilization of budgeting tool as extent use of management accounting practice in their company. A mean score exceeding 3 is considered indicative of satisfaction with the test variables. Standard deviation is a measure of the dispersion or variability from the mean. Shows that, budgeting practice have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools. The highest use among the tools of traditional budgeting is ABP_2 known as Budgeting for (short term) planning. This tool has the mean value 3.9103 which is exceed the benchmark category of mean value 3.00. Second largest use of traditional budgeting tools is ABP_4 known as master budgets with a mean value 3.8846. The other frequently used budgeting tools are Budgetary Control (3.7051), Budgeting for controlling cost (3.6154) and Flexible budget (3.1923).

Table 6.13: Descriptive Statistics of Usage of Contemporary Budgeting in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation

ABP_7	Activity-based budgeting (ABB)	78	1.00	5.00	1.8205	1.19244
ABP_8	Zero-based budgeting (ZBB)	78	1.00	5.00	3.1026	1.16875
ABP_9	Budgeting with “what if analysis”	78	1.00	5.00	2.6923	1.12015
ABP_10	Continuous/rolling budget	78	1.00	5.00	2.8333	1.34277
				Overall Mean Value	2.611	

Table 6.13 shows that, tools of contemporary budgeting have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools Zero-based budgeting (ZBB) (ABP_8) that has highest mean value 3.1026. So the uses of contemporary budgeting state that highest use is zero-based budgeting (ZBB) (ABP_8) with a mean value 3.1026. Zero-Based Budgeting (ZBB) is one approach that does this. It necessitates that each department explain its whole budget, regardless of prior allocations, from the ground up. Resource allocation should be based on current requirements and priorities, not on past practice, according to ZBB. This approach encourages a careful analysis of every expense, which increases productivity and economy Henttu-Aho & Järvinen, 2013). Rests of the tools have less impotence because of lowest mean value as well as bellow the mean value of benchmark category 3.00.

Finally, the overall mean value of traditional budgeting is 3.3791 and mean value of contemporary budgeting is 2.611. The highest mean value achieved by traditional budgeting, and the decision is that, uses of traditional budgeting is greater than contemporary budgeting tools and method.

6.5.4 Extent Use of Performance Evaluation Tools

Accounting performance review is a crucial procedure that forms the basis of an organization's strategic decision-making and efficient financial management. It is impossible to overestimate the significance of performance evaluation since it offers a methodical and impartial way to evaluate an organization's overall financial health as well as its efficacy and efficiency (Phong et al., 2023). Performance evaluation is crucial for determining areas for improvement and evaluating return on investment (ROI) in the context of financial management. Organisations can assess the profitability of various initiatives by examining financial metrics and key performance indicators (KPIs) (Azhang et al., 2023). This dynamic approach enables organisations to improve accountability, maximise financial performance, pinpoint opportunities for development,

synchronise objectives, inspire staff, and strategically adjust to the changing business environment (Khosravi et al., 2022).

Table 6.14: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.783	.832	9

Table 6.15: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
454.162	51.609	8	70	.000

However the reliability statistics has been presented by Cronbach's Alpha in Table 6.14. Cronbach's Alpha based on standardised items is 0.832, and the reliability test yields a value of 0.782, both of which are suitable to conduct SEM. The Hotelling's T-Squared test value is 454.162 with an F-statistics 51.609, which is significant at the 1% level, is displayed in Table 6.15.

Table 6.16: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.791
Bartlett's Test of Sphericity	Approx. Chi-Square	334.554
	Df	36
	Sig.	.000

Table 6.16 shows the Principal Component Analysis where the extracted values of components are greater than 0.40 which is indicate no inconsistency in the selected factors. Table 6.17 put on view an acceptable KMO value of 0.791, indicating a sufficient sample size.

Table 6.17: Principal Component Analysis

	Initial	Extraction
APES_1	1	.602
APES_2	1	.787
APES_3	1	.803
APES_4	1	.660
APES_5	1	.470
APES_6	1	.719
APES_7	1	.484
APES_8	1	.605
APES_9	1	.635

6.5.4.1 Usage of Performance Evaluation System of Management Accounting Practice in Respondents Company

In this section scrutinized the extent use of Performance Evaluation System as tools of MAP in manufacturing industries in Bangladesh. Participants were requested to specify their level of agreement with statements regarding the utilization of strategic management accounting practice in their company. The responses were rated on a five-point Likert scale from 1 (never) to 5 (very often). A mean score exceeding 3 is considered indicative of satisfaction with the test variables. Standard deviation is a measure of the dispersion or variability from the mean. A low standard deviation signifies data points clustering closely around the mean, while a high standard deviation suggests data spread out throughout a wide range of values. The findings are displayed in the Tables below.

Table 6.17: Descriptive Statistics of Usage of Traditional Performance Evaluation System in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
APES_1	Ratio Analysis	78	2.00	5.00	4.0256	.68328

APES_2	Cash flow Statement Analysis	78	3.00	5.00	4.2821	.53202
APES_3	Income Statement & Balance sheet Analysis	78	2.00	5.00	4.2308	.60136
APES_4	Variance Analysis	78	1.00	5.00	4.0769	.87933
APES_5	Fund Flow Analysis	78	1.00	5.00	3.7051	1.03333
APES_6	Return on Investment (ROI)	78	1.00	5.00	2.5256	1.38381
				Overall Mean Value	3.803	

Table 6.17 shows that, tools of traditional performance evaluations have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools cash flow statement analysis (APES_2) that has highest mean value 4.2821. So the most frequently used traditional performance evaluations systems are cash flow statement analysis (4.2821), income statement & balance sheet analysis (4.2308), ratio analysis (4.0256).

Table 6.18: Descriptive Statistics of Usage of Contemporary Performance Evaluation System in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
APES_7	Economic value add (EVA) or Residual income	78	1.00	5.00	3.7692	1.08020
APES_8	Segment Reporting	78	1.00	5.00	2.2308	1.37627
APES_9	Balance Scorecard	78	1.00	5.00	1.9487	1.12697
				Overall Mean Value	2.649	

Table 6.18 shows that, tools of contemporary performance evaluations have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools Economic value add (EVA) or Residual income (APES_7) that has highest mean value 3.7692. So the uses of contemporary performance evaluations state that highest use is Economic value add (EVA) or Residual income (APES_7). Table 6.19 presents the descriptive statistics of usage of

non-financial performance evaluation system in Respondents Company. Regarding the tools compliance with the processes (NF_6) that has highest mean value 3.6538 and second largest use is quality of product/services (NF_5) with a mean value 3.6410. Overall mean value of non financial measure of performance evaluation system is 3.202 that is exceed the benchmark category.

Table 6.19: Descriptive Statistics of Usage of Non-Financial Performance Evaluation System in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
Nonfinancial Measure Customer Oriented						
NF_1	Numbers of customer complaints	78	1.00	5.00	2.8333	1.10978
NF_2	Numbers of customer satisfaction	78	1.00	5.00	2.5897	1.01208
Nonfinancial Measure Employee Oriented						
NF_3	Employee turnover	78	1.00	5.00	3.1923	.77389
NF_4	Absentee rate	78	1.00	5.00	3.3846	.72490
Nonfinancial Measure Operations Oriented						
NF_5	Quality of product/services	78	1.00	5.00	3.6410	.70203
NF_6	Compliance with the processes	78	1.00	5.00	3.6538	.69929
	Overall Mean Value				3.202	

Remark, the overall mean values of traditional performance evaluation system are 3.803 and mean value of contemporary performance evaluation system is 2.649. Overall mean value of non financial measure of performance evaluation system is 3.202 that is exceed the benchmark category. It is imperative that organisations seeking to conduct a thorough assessment of their financial performance, traditional performance evaluation system are more effective (Carmona & Ezzamel, 2023). The highest mean value achieved by traditional performance evaluation system, and the decision is that, the uses of traditional performance evaluation system is more applicable in manufacturing industries in Bangladesh.

6.5.5 Extent Use of Decision Making Tools

Table 6.20 shows the result of reliability statistics of the SEM path analysis based on decision making process in MAP. Cronbach's Alpha based on standardised items is 0.851, and the reliability test yields a value of 0.849, both of which are acceptable.

Table 6.20: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.849	.851	9

Table 6.21: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
96.109	10.921	8	70	.000

The Hotelling's T-Squared Test, which is significant at the 1% level, is displayed in Table 6.21. Table 6.22 displays an acceptable KMO value of 0.795, indicating a sufficient sample size

Table 6.22: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	302.546
	Df	36
	Sig.	.000

Table 6.23: Principal Component Analysis

	Initial	Extraction

ADM_1	1	.560
ADM_2	1	.632
ADM_3	1	.693
ADM_4	1	.400
ADM_5	1	.601
ADM_6	1	.698
ADM_7	1	.608
ADM_8	1	.710
ADM_9	1	.545

. Table 6.23 shows the Principal Component Analysis where the extracted values of components are greater than 0.40 (1>0.40>0 which is indicate no inconsistency in the selected factors.

6.5.5.1 Usage of Decision Making Tools of Management Accounting Practice in Respondents Company

Decision making tools are consider as both are traditional decision making in terms of long term and short term decision making. Table 6.24 is present that the decision making tools ADM_1 to ADM_4 are short term use and ADM_5 to ADM_9 are long term use. Participants from the industries were requested to specify their level of agreement with statements regarding the utilization of decision making as tool of management accounting practice in their company. The responses were rated on a five-point Likert scale from 1 (never) to 5 (very often). A mean score exceeding 3 is considered indicative of satisfaction with the test variables. Standard deviation is a measure of the dispersion or variability from the mean. Table 4 shows that, tools of traditional decision making in terms of long term and short term decision making have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools. The highest use among the tools of decision making is product profitability analysis, contemporary tools in short term. This tool has the mean value 4.0385 which is exceed the benchmark category of mean value 3.00. The other frequently used short term decision making tool are Cost-Volume-Profit Analysis (3.8974) and Stock control models (Inventory) (3.8077). In case of long term

decision making the respondent answered Evaluation of major capital investments based on pay-back period or average rate of return (3.7564), Evaluation of major capital investments based on discounted cash flow method(s) (3.6154), Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation (3.5769), Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation (3.6154) and For the evaluation of major capital investment, non-financial aspects are documented and reported (3.1667) as frequently used tools.

Table 6.24: Descriptive Statistics of Usage of Traditional and Contemporary Decision Making in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ADM_1	Cost-Volume-Profit Analysis	78	1.00	5.00	3.8974	.71332
ADM_3	Stock control models (Inventory)	78	1.00	5.00	3.8077	.96776
ADM_4 (1-4 Short Term)	Evaluation the risk of major capital investment projects by using probability analysis or computer simulation	78	1.00	5.00	3.3333	1.10096
Contemporary Decision Making in Respondents Company						
ADM_2 (1-4 Short Term)	Product profitability analysis	78	2.00	5.00	4.0385	.72868
	Overall Mean Value (Short Term)				3.764	
ADM_5	Evaluation of major capital investments based on discounted cash flow method(s)	78	1.00	5.00	3.6154	.97008
ADM_6	Evaluation of major capital investments based on pay-back period or average rate of return	78	1.00	5.00	3.7564	.85563

ADM_7	For the evaluation of major capital investment, non-financial aspects are documented and reported	78	1.00	5.00	3.1667	1.03719
ADM_8	Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation	78	1.00	5.00	3.5769	.86067
ADM_9 (5-9 Long Term)	Performing sensitivity "what if" analysis when evaluating major investment project	78	1.00	5.00	3.0641	1.15477
	Overall Mean Value (Long Term)				3.431	

Concluding remark, the overall mean values of traditional short term decision making system are 3.764 and mean value of long term decision making system is 3.431. The highest mean value implied that for Decision making perspective, the uses of traditional short term decision making system is frequently used by the manufacturing industries in Bangladesh.

6.5.6 Extent Use of Strategic Analysis Tools

The significance of statistical techniques such as Hotelling's T-Squared Test and Cronbach's Alpha in the field of research and data analysis cannot be overstated. These evaluations serve a variety of purposes, bolstering the reliability and validity of research findings in numerous fields. However, Cronbach's Alpha is a widely used internal consistency statistic in the social sciences and business. It is essential for figuring out how trustworthy a set of items is in a scale or survey. By measuring the degree to which specific questions consistently evaluate the same underlying concept; Cronbach's Alpha can be used by researchers to examine the reliability of their assessment tools (Pires et al., 2023). If the Cronbach's Alpha value is high a sign of a high degree of internal

consistency there can be trust that the items are appropriately measuring the intended construct. This guarantees that research conclusions are supported by trustworthy and consistent measurements, which strengthens the study's overall robustness.

Table 6.25: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.785	.880	12

Cronbach's Alpha based on standardised items is 0.880, and the reliability test yields a value of 0.784, both of which are satisfactory that is presented in Table 6.25.

Table 6.26: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
232.063	18.357	11	67	.000

The Hotelling's T-Squared Test, which is significant at the 1% level, is displayed in Table 6.26. The estimated F-statstics is 18.357 and it is significant at 1% level to shows the reliability and validity of the selected data.

Table 6.27: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.844
Bartlett's Test of Sphericity	Approx. Chi-Square	466.579
	Df	66
	Sig.	.000

Table 6.28: Principal Component Analysis

	Initial	Extraction
ASA_1	1	.493
ASA_2	1	.417
ASA_3	1	.638
ASA_4	1	.677
ASA_5	1	.690
ASA_6	1	.695
ASA_7	1	.470
ASA_9	1	.351
ASA_10	1	.596
ASA_11	1	.500
ASA_12	1	.733
ASA_13	1	.649

Table 6.27 displays an acceptable KMO value of 0.844, indicating a sufficient sample size. Table 6.28 shows the Principal Component Analysis where the extracted values of components are greater than 0.40 which is indicate no inconsistency in the selected factors that means there is no inconsistency to estimate SEM.

6.5.6.1 Usage of Strategic Analysis Tools of Management Accounting Practice in Respondents Company

In this study investigated the extent use of MAP in manufacturing industries in Bangladesh. Participants were requested to specify their level of agreement with statements regarding the utilization of strategic management accounting practice in their company. The responses were rated on a five-point Likert scale from 1 (never) to 5 (very often). A mean score exceeding 3 is considered indicative of satisfaction with the test variables. Standard deviation is a measure of the dispersion or variability from the mean. A low standard deviation signifies data points clustering closely around the mean, while a high standard deviation suggests data spread out throughout a wide range of values. The findings are displayed in the Tables below. The findings are displayed in the Tables below.

Table 6.29: Descriptive Statistics of Usage of Strategic Planning in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ASA_1	Benchmarking	78	1.00	5.00	3.7179	.89584
ASA_2	Integrated performance measurement system	78	1.00	5.00	3.3333	1.04031
	Overall mean value				3.52	

Table 6.29 shows that, tools of strategic planning have mean value above 3.00 which is satisfactory to ensure extent use and the company has priority regarding the tools ASA_1. Strategic analysis goes beyond regular financial reporting by examining the consequences of financial data for long-term planning and decision-making and it has significant impact as MAP tools (Carmona & Ezzamel, 2023). Strategic analysis entails evaluating key performance indicators (KPIs) to determine progress towards strategic objectives. Strategic analysis encompasses scenario planning and sensitivity analysis, enabling organizations to predict the financial consequences of various strategic decisions or alterations in the business environment (Aleksandrovich-Adamenko & Viktorovna-Koneva, 2022).

Table 6.30: Descriptive Statistics of Usage of Customer Accounting in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ASA_3	Customer Accounting	78	2.00	5.00	3.2821	1.01799
ASA_4	Customer profitability analysis	78	1.00	5.00	3.3205	1.06288
ASA_5	Lifetime customer profitability analysis	78	1.00	5.00	3.3077	1.07278
ASA_6	Valuation of customer as assets	78	1.00	5.00	2.4103	1.21073

	Overall mean value	3.077	

Table 6.29 shows that the respondent company preferred benchmarking (3.7179) for strategic planning purpose. From Table 6.30, in case of Customer Accounting the company has priority to use customer profitability analysis (3.3205), Lifetime customer profitability analysis (3.3077).

Table 6.31: Descriptive Statistics of Usage of Strategic Decision in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ASA_7	Brand valuation	78	1.00	5.00	2.6154	1.33125
ASA_8	Strategic Pricing	78	1.00	5.00	2.0000	1.06904
ASA_9	Strategic costing	78	1.00	5.00	3.3718	.94125
	Overall mean value				2.775	

From Table 6.31, for Strategic Decision making perspective, the company has priority to use strategic costing (ASA_9) because of highest mean value. However, Table 6.32, the company has priority to use the competitive position monitoring (ASA_10) in term of competitor accounting since the highest mean value among the used tools. Overall measure of the highest usage of strategic analysis tools of management accounting practice in Respondents Company is benchmarking (ASA_1) because it has estimate highest mean value among the tools that have been used.

Table 6.32: Descriptive Statistics of Usage of Competitor Accounting in Respondents Company

Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
ASA_10	Competitive position monitoring	78	1.00	5.00	3.1923	1.29993
ASA_11	Competitor cost assessment	78	1.00	5.00	2.9487	1.27816
ASA_12	Competitor performance appraisal based on published financial statements	78	1.00	5.00	2.0897	1.20805

ASA_13	Analysis of competitors' strength and weaknesses	78	1.00	5.00	2.1026	1.25450
				Overall mean value	2.577	

In termination, the overall mean value of strategic planning is 3.52. Tools of uses of customer accounting is 3.077, mean value of strategic decision is 2.775 and the mean value of competitor accounting is 2.577. The highest mean value gained by strategic planning, that is why we may made decision that, uses of strategic planning is greater than any others tools and methods of strategic analysis in manufacturing companies in Bangladesh.

6.6 Conclusion

The majority of responding manufacturing industries in Bangladesh have adopted all five types of MAP examined, which include budgeting, performance evaluation, decision support system, and SMA. Still, a small percentage made use of SMA and decision support tools. The findings also demonstrate that established procedures (budgeting, performance evaluation, and costing) have a greater acceptance rate for traditional management accounting techniques than do more current practice (decision support system and SMA). The study also looked into how many different specialised management accounting procedures manufacturing companies utilise. The responses provided information on the degree to which 66 management accounting practice, categorized under the five main MAP areas mentioned previously, were used. The findings indicate that the popular and frequently used traditional costing methods are absorption costing/full cost accounting and the separation of variable and fixed cost (mean 4.0513), Department or multiple plant-wide overhead rate s(3.8205), Process costing (3.6538) and Batch costing (3.0256).

In case of the contemporary costing and strategic costing, both have no significant impact because the mean values of all the contemporary strategic costing tools are less than benchmark category 3.00. However, the company has priority to use the Activity based Costing (ABC) (2.7692), Target Costing (2.0641) and Throughput Costing (2.0385) as contemporary tools and Total Quality Management (TQM) (2.7051) as strategic costing tools. As strategic costing tools of management

accounting practice, the respondents Company preferred Total Quality Management (TQM) having estimate highest mean value 2.7051 among the tools that have been used but all the tools have mean value less than benchmark 3.00. So the average mean value of traditional costing is greater than others costing tools and frequently used costing tools than the contemporary and strategic costing tools.

In case of Budgeting system, the majority of the respondents also indicated Budgeting for (short term) planning (mean value 3.9103) and Master Budgets (mean value 3.8846) as the highest use among the tools of traditional budgeting. The other frequently used traditional budgeting tools are Budgetary Control (3.7051), Budgeting for controlling cost (3.6154) and Flexible budget (3.1923).As the uses of contemporary budgeting, the result showed that highest use is zero-based budgeting (ZBB) with a mean value 3.1026.). Other contemporary tools like, Activity-based budgeting (ABB), Budgeting with "what if analysis", Continuous/rolling budget have less impotence because of lowest mean value as well as bellow the mean value of benchmark category 3.00.

In evaluating firm performance, most of the respondents indicated a high use of traditional financial performance measures like cash flow statement analysis (4.2821), Income Statement & Balance sheet Analysis (4.2308), Ratio Analysis (4.0256). The study found that company has priority regarding the tools Economic value add (EVA) or Residual income (3.7692) while the other have insignificant value. Among the Non-Financial Performance Evaluation System, compliance with the processes (3.6538), quality of product/services (3.6410) Absentee rate (3.3846) is frequently used.

Under the decision-making system, the results show that manufacturing companies in Bangladesh widely used traditional short-term decision-making tools. Here, Profitability analysis (4.0385),Cost-Volume-Profit Analysis (3.8974) and Stock control models (Inventory)(3.8077), Major capital investment assessment based on average rate of return or payback period (3.7564); evaluation of major capital investments based on discounted cash flow method(s) (3.6154); computation and application of cost of capital in discounting cash flow for major capital investment evaluation (3.5769); and non-financial aspects are documented and reported (3.1667) for the evaluation of major capital investment are often utilised for decision-making perspective.

Manufacturing companies in Bangladesh practised a classified tool for SMA. Here, the result showed that strategic planning (3.52), customer accounting (3.077), strategic decision (2.775) and competitor accounting (2.577) is used by the respondent companies.

The results provide some fresh insights into how Bangladeshi manufacturing enterprises employ MAP. The authors propose that manufacturing organisations in Bangladesh have generally embraced fundamental management accounting practice, such as financial performance metrics, budgeting systems, and costing systems. Furthermore, it is possible that less innovative management accounting abilities, such ABC, SMA, and other contemporary methodologies, are used in underdeveloped nations than in developed ones because the respondents are based there. This perspective is consistent with Chun et al.'s (1994) assertion that Malaysian businesses favour using standard management accounting systems to satisfy their requirements for both internal and external reporting. This view is also supported by other research conducted in developing nations, including those of Joshi (2001) in India, El-Ebaishi et al. (2003) in Saudi Arabia, and Phadoongsitthi (2003) in Thailand. According to Joshi (2001), authoritarian leadership, long-term focus, and the conservative mindset of Indian management are the main causes of the low acceptance of recently created MAP in Indian companies. Additionally, they imply that a lot of Indian businesses think it will be costly to implement the new management accounting methods, especially when it comes to benchmarking. Other causes could be a lack of experience and education in certain fields. According to Phadoongsitthi (2003), there is a similar low adoption of newly developed MAP in Thailand and India because both nations have large power distances and low levels of group individualism. Additionally, both nations face similar issues related to a lack of training and expertise. Despite reports of a rise in the use of sophisticated MAP, research conducted in industrialised countries (see, for instance, Chenhall and Langfield-Smith, 1998; Pierce and O'Dea, 1998; and Abdel-Kader and Luther, 2006) concurred that basic or conventional MAP remain the norm in the majority of organisations. The argument suggests that the reason for the high level of adoption of old procedures could be that, in comparison to modern management accounting techniques, information and skills related to these metrics are more easily accessible. As a result, sophisticated systems are not commonly used in practice, maybe as a result of the costs, practicality, and uncertainties associated with acquiring the information.

It is concluded that within manufacturing companies in Bangladesh, there is extensive use of basic MAP. The uptake among the respondents shows that management accounting is well embedded in responding manufacturing companies though the current status of using MAP is still in the traditional level in Bangladesh. In sum, the research findings confirm the popularity of the use of traditional management accounting practice whereas the adoption rates of contemporary management accountingpractice are disappointing. It is consistent with previous findings respectively in U.K.,U.S., Australia, New Zealand, and Asian countries of Drury et al., (1993), Szendi and Elmore, (1993), Chenhall and Langfield-Smith, (1998a), Adler et al., (2000), Guilding etal., (2000), EI-Ebaishi et al., (2003), and Phadoongsitthi (2003). It is concluded that within manufacturing companies in Bangladesh, there is extensive use of basic MAP. The uptake among the respondents shows that management accounting is well embedded in responding manufacturing companies though the current status of using MAP is still in the traditional level in Bangladesh.

Chapter 7

Contingent Factors and Management Accounting Practice

7.1 Introduction

Numerous techniques have been developed to address innovations and technology in the business environment. However, the implementation of changes in management accounting practice must align with the present business needs (Paaso, 2013). Each organization has its unique management accounting system, which is influenced by internal and external factors, including changes in technology or infrastructure (Alleyne & Weekes-Marshall, 2011). Theory suggests that there is no universally applicable approach to control organizations that can be consistently applied in all conditions (Paaso, 2013). According to contingency theory, there is no one-size-fits-all model to describe organizational design variations, and therefore, organization design relies on contingency factors specific to the situation. Contingency variables such as business policy, external environment, company size, and type influence the design of management control systems. The contingency approach assumes that the design and practice of management control systems are influenced by the context in which they are applied (Dropulić, 2013). However this chapter investigated the second research questions entitled on "What internal contingent factors affect the extent of the use of MAP by manufacturing companies in Bangladesh?"

At the micro level, management accounting practice are concerned with the daily activities of managerial actors (Šiška, 2016). The Contingency Theory emerged in the 1960s as a critique of universal theories and provided a valuable tool for improving management theories (Porporato & Waweru, 2011). It posits that organizational variables have complex interrelationships among themselves and with the environmental conditions (Porporato & Waweru, 2011). The CT recommends that business organizations should adjust to their current circumstance to maximize their profit (Silva et al., 2014). With the CT, the idea of possibility factors emerges as key determinants for characterizing the most proper framework that adds to organization performance (Shenkar & Ellis, 2022). In view of this hypothesis, the objective is to comprehend the way in which organizations conform to these contingent factors, like size, age, contest power, natural vulnerability, innovation, and ICT (Camacho, 2010; Silva et al., 2014). The focal suggestion of

possibility hypothesis expresses that authoritative presentation relies upon the fit between hierarchical setting and construction (Cadez & Guilding, 2008). Contingent factors like innovation, age, size, stuff qualifications proportions of the intricacy level looked by associations (Donaldson, 2007). The construction of associations is affected by vulnerability, which isn't just brought about by outside logical factors yet in addition by factors like the degree of authoritative information and its effect on inside processes (Chapman, 1997).

Concentrating on CT assists with characterizing the ideal way for accomplishing organizational targets and objectives. Investigating the CT inside which an association works can add to its financial exhibition (Dafouz & Camacho-Miñano, 2016). As per Donaldson (2007), the CT has given a rational worldview to investigating organizational designs. It states that there is no universally effective organizational structure, but an optimal structure is contingent upon specific factors. Applying universally applicable principles to diverse organizations is not suitable due to their differences in size, objectives, tasks, and other situational factors (Sandoval-Almazán, 2013). Haldma and Lääts (2002) directed research on the effects of the MAP in modern undertakings in Estonia, utilizing the CT approach. They found that the viability of a MAP configuration relies upon its capacity to adjust to changes in outer circumstances, mechanical headways, and hierarchical viewpoints. Changes in cost and the MAP are related with changes in the business and MAP (Haldma & Laats, 2002). However, the contingency factor has significance role in the context of MAP.

7.2 Different Forms of Contingency Fit in Management Accounting (MA)

In the context of Management Accounting (MA), there are various forms of contingency fit within Contingency Theory (CT). Researchers adopting CT in MA should specify and justify the particular form of fit they have chosen. Chenhall (2003) and Gerdin and Greve (2004) are two significant studies that discuss different forms of contingency fit. Chenhall (2003) identified three forms of contingency fit in the context of Management Control Systems (MCS): selection, systems and interaction approaches. The first form focuses on examining the impact of contextual factors on MA systems (dependent factor), without considering their influence on company performance. The collaboration structure investigates the connection between MA frameworks and company FP, considering the directing job of context oriented factors. The frameworks based MA research

examines the joined impact of context oriented elements and MA framework attributes on FP. Likewise, Gerdin and Greve (2004) talk about various types of contingency factors with regards to technique MA frameworks. They propose a detailed framework, based on a hierarchy, to explain these forms. The framework begins with the Cartesian vs. Configuration paradigms of fit, addressing the association between factors and the representation of fit. The Cartesian (traditional) paradigm focuses on studying the relationship between individual contextual factors and specific structural features, and how this relationship impacts performance. It presents fit between organizational structure and context as a continuum, allowing organizations to make incremental adjustments to improve performance. In contrast, the configuration paradigm takes a holistic approach, examining the relationship between a wide range of contextual factors and multiple structural attributes. It hypothesizes that there are only a few positions of fit, and organizations can make "quantum jumps" between these positions. The framework also distinguishes between the congruence and contingency approaches to fit. The congruence approach focuses on studying the relationship between organization structure and context without explicitly testing its impact on performance. The goal of the contingency approach is to determine the type of contingency fit that produces the highest performance by looking at how this relationship affects organizational performance. Two research methodologies are recognized within the Cartesian approach: the moderation approach and the mediation approach. The moderation approach presupposes that a third component, such as business strategy, moderates the impact of an independent factor (the design of MA systems) on a dependent factor (performance). The mediation approach enables an intervening factor (MAS characteristics) to function as a link between the dependent component (performance) and the contextual factor. In other words, the mediation approach proposes that the MAS traits work as an intermediary element to mediate the fit between the contextual factor and corporate performance. It is important to note that the selection form of fit has been largely used in many MA researches, especially those that focus on management accounting procedures (e.g., Krumwiede, 1998; Malmi, 1999; Luft and Shields, 2003). Researchers justify this choice by stating that companies tend to implement only those MA practice that can enhance their performance, thus eliminating the need to study the influence of the association between MA system features and contingent factors on company performance. Similarly, in line with the nature of this study, the selection (congruence) approach was adopted to examine the relationship between the extent

of MA practice implementation (dependent factors) and a set of internal and external contingent variables, assessing their impact on the performance of the companies being studied.

7.3 Organizational Activity for Contingency-based MAP

The contemporary contingency theory of management accounting aims to explain how specific circumstances, known as contingencies, influence the use of Management Accounting Practice (MAP). Research in contingency-based MAP expands upon the contingent variables used in studies on organizational structure and Management Control Systems (MCS) to explain the adoption of MAP within an organization. Like organizational structures (OS) and MCS, examinations underscore the meaning of outside factors, frequently alluded to as external natural vulnerability or market influences, as informative factors while inspecting the advancement of MAP. For example, Bruns and Kaplan (1991) recognized rivalry as the essential outside factor that inspires administrators to carry out new cost frameworks. Anderson and Larnen (1999) researched the development of different MAP in 14 Indian firms and found that adjustments of the outer climate trigger relating changes in MAP. Luther and Longden (2001) affirmed that elements, for example, rivalry power and ecological unpredictability lead to the MAP in South Africa. Also, Haldma and Laats (2002), who concentrated on MAP in Estonian manufacturing organizations, contended that FP, planning, and MAP, making them all the more remotely engaged and open. They likewise saw that adjustments of MAP are related with shifts in the outside business and accounting. Szychta (2002), in his examination of the utilization of the MAP and strategies in Polish firms, presumed that changes in the business climate are one of the main thrusts behind the reception of the MAP.

Hoque and James's (2000) theory that a strong market position (market factor) is positively correlated with a higher dependence on a recently established MAP, the Balanced Scorecard (BSC), was not supported by their research. Similar to this, O'Connor et al. (2004) did not discover evidence to support the claim that Chinese businesses would adopt Western MAP more frequently as a result of increased market rivalry. These findings are consistent with those made by Merchant (1984), who came to the conclusion that there does not seem to be much of a connection between market factors and a firm's budgeting system. The production technology contingency variable has also been looked at in relation to the adoption of MAP in addition to external factors. The effect

of Advanced Manufacturing Technologies (AMTs) on management accounting systems was investigated by Tayles and Drury in 1994. They presented three key conclusions: AMT and non-AMT investments are not differentiated by methods used to assess investments in modern manufacturing (i); (ii); only a minority of accountants with experience in Just-in-Time (JIT) systems believed that JIT adoption brought changes to their company's accounting system for generating product costs; and (iii); accountants with experience in the development of AMTs stated that these technologies had a significant impact on changing their company's management a. Similar to this, Abdel-Maksoud et al. (2005) discovered that companies with sophisticated MAP are those that have made large investments in AMT, Total Quality Management (TQM), and JIT. Higher degrees of cost system complexity are positively correlated with the scope of JIT and lean production technique utilization, according to Al-Omiri and Drury's (2007) research, which validated these conclusions. Furthermore, Abdel-Kader and Luther (2008) came to the conclusion that the implementation of AMT, TQM, and JIT systems can account for variations in management accounting sophistication. Technology, according to Szychta (2002), is a key factor in the shift in MAP usage in Poland.

Like other contingency studies, research has shown that the size of a firm impacts the plan and extent of the MAP (Abdel-Kader & Luther, 2008; Cadez & Guilding, 2008). Bigger firms are found to have more refined Guides. For example, Hoque and James (2000) directed a review of 66 “Australian manufacturing organizations” and saw that bigger firms will generally utilize the BSC. Joshi (2001) revealed that authoritative size is a significant consider the reception of cutting edge MAP in India. Essentially, Cadez and Guilding (2008) found a positive relationship between the use of SMA and company size. One potential clarification is that bigger associations have more noteworthy assets contrasted with their more modest partners, permitting them to bear the cost of the reception of MAP (Abdel-Kader and Luther, 2008).

7.4 Management Accounting Practice and Contingent Factors

There are several contingent factors are investigated by this study such as Owners' participation, stuff qualification, age, size and ICT use in manufacturing companies in Bangladesh. However a functional form has been developed to identify the relationship between the contingency factors and extent use of MAP.

$$\boldsymbol{MAPs = F(\ ORGS\ + AGC\ + QUL\ + ONP\ + TEC\ )} \qquad \boldsymbol{(1)}$$

However, a statistical form of this function has been shown in following equation no 2.

$$\boldsymbol{MAPs_{it} = \beta_1 ORGS_{it} + \beta_2 AGC_{it} + \beta_3 QUL_{it} + \beta_4 ONP_{it} + \beta_5 TEC_{it} + \varepsilon_{it}} \qquad \boldsymbol{(2)}$$

Management accounting practice (MAP) used as latent variable and age of the company (AGC), size of the company (ORGS) , qualified stuffs (QUL), uses of technology (TEC) and ownership practice (ONP) of the manufacturing firms are used as observed variable. $\boldsymbol{\beta_1}$ to $\boldsymbol{\beta_5}$ presents coefficients, t means time of survey and i means cross section unit such as individual company.

7.4.1 Costing and Contingent Factors

Yalcin (2012) focuses on the significance of cost information, as it determines the extent and nature of management accounting practice. The requirement for advanced accounting practice such as Activity-Based Costing (ABC) is justified by factors such as product diversity and cost structure, which can influence the sophistication of costing systems.

Contingency theory provides insights into how organizational and environmental factors impact the characteristics and sophistication of costing systems (Sartorius et al., 2007). Contingency theory, which pertains to management accounting, is based on the idea that no one accounting system that is appropriate for all businesses, regardless of their characteristics and environment, exists (Shahzadi, 2018). As a result, contingency theory enables the identification of particular elements and situations related to a suitable costing method. A study on the effects of numerous situational elements, such as product diversity, AMT, and cost structure, on the design decisions of costing systems in five different Australian locales was undertaken by Abernathy et al. in 2001. According to many researchers (e.g., Abdel-Kader & Luther, 2008; Ahmad & Zabri, 2015), the adoption of complex costing systems is significantly influenced by the firm size. Through their analysis of the literature, Drury and Tayles (2005) determined that the most frequently taken into account contingency elements were size, technology, and cost structure. According to Nimtrakoon and Tayles (2015), strategy is also acknowledged as a crucial contingency component. Wallace (2002) looked at risk factors associated with the level of competition, the cost structure,

technology, scale, strategy, and top management support. Ahmed and Zabri (2015) looked into how management accounting procedures in Malaysian SMEs were affected by market rivalry intensity, technology, size, and owner/manager commitment. Nine contextual elements that affect the sophistication of pricing systems were discovered by Al-Omiri and Drury (2007). The adoption of complex costing methods and business size has been found to be positively correlated in numerous researches (e.g., Ahmad & Zabri, 2015; Tsifora & Chatzoglou, 2016; Nguyen et al., 2019). According to Abdel-Kader and Luther (2008), the size of the business has a significant impact on whether complicated and advanced costing systems are adopted. It serves as the main criterion for separating ABC adopters from non-adopters (Bjornenak, 1997). Larger businesses have more resources available to them to implement ABC (Groot, 1999). Additionally, they frequently have internal communication systems that are more efficient, which helps innovations spread and be adopted (Ahmad & Zabri, 2015). A comprehensive and sophisticated management accounting system is required to manage the complexity of the operations that larger organizations frequently engage in (Ahmad & Zabri, 2015). Marques (2012) used the perspectives of contingency theory and new institutional sociology to analyze the adoption, implementation, and use of target costing inside an organization. Regarding contingency theory, the study came to the conclusion that target costing adoption and use were favored by observed contingency elements (environment, strategy, size, structure, and technology). According to a study by Ittner and Larcker (2001), there is a correlation between organization size and the degree of ABC application in manufacturing organizations. According to the study, larger companies were more likely to use ABC since managing their intricate operations required more advanced costing techniques. Study by Gupta and Galloway (2003), investigated the adoption of standard costing practice and its association with organization size. The findings revealed that larger manufacturing firms were more likely to adopt and use standard costing compared to smaller firms. The study attributed this relationship to the availability of resources and the need for formalized cost control systems in larger organizations. Owners' participation refers to the involvement and engagement of owners or top management in the decision-making processes of a manufacturing company. Their active participation can influence the extent of use of costing systems within the organization, as they play a key role in setting strategic objectives and resource allocation decisions. Study by Langfield-Smith and Smith (2003): The researchers investigated the factors influencing the use of management accounting practice, including costing systems, in manufacturing firms. The study

found that owners' participation was positively associated with the extent of costing system utilization. When owners were actively involved in decision-making processes, including setting targets, resource allocation, and performance evaluation, the organization was more likely to adopt and utilize costing systems to support these decisions.

Overall, these prior studies indicate that larger manufacturing companies tend to have a higher likelihood of adopting and utilizing more advanced costing practice, such as ABC or standard costing. The complexity of their operations and the need for more accurate and detailed cost information drive the adoption of these practice. However, it is important to note that the extent of use of costing practice can vary even within organizations of the same size, age, and owner participation and IT as factors such as management commitment and organizational culture also play crucial roles in shaping the utilization of costing practice. Understanding the functional relationship between organization size and the extent of use of costing practice can help manufacturing companies tailor their costing strategies based on their size, age, and owner participation and IT and operational characteristics, thereby enhancing cost management and decision-making processes.

7.4.2 Strategic Management or Strategic Cost Management and Contingent Factors

The term “SCM” refers to a group of strategies used by corporate management to produce useful cost-related data along the value chain, facilitating strategic decision-making and alignment with the dynamic business environment. Numerous scholars (Simons, 1987; Chenhall & Langfield-Smith, 1998; Guilding, 1999; Anderson & Lanen, 1999; Abernethy & Brownell, 1999; Cinquini & Tenucci, 2010) have used the contingency theory approach to study SCM practice. On the basis of this, Cadez and Guilding (2008) carried out a thorough investigation of the influence of strategic decisions, market orientation, and firm size on various components of SCM as well as the mediating impact of SCM on business performance. Siska (2016) found that larger companies in the Czech Republic, a developing country, extensively utilize strategic management accounting techniques, which aligns with the findings of Cadez and Guilding (2008) regarding the influence of strategy type, formulation, and company size on strategic management accounting usage in Slovenia. This can be attributed to the greater resources available to larger firms, allowing them to

implement more sophisticated management accounting practice (Nguyen et al., 2019; Abdel-Kader & Luther, 2008). As businesses grow, communication and control challenges emerge, necessitating specialized and sophisticated accounting and control processes (Hoque & James, 2000). Furthermore, Abdel-Kader and Luther (2008) noted that large companies, due to their resources and expertise, can afford to upgrade from simpler to more advanced management accounting practice. In their study, Gliaubicas and Kanapickiene (2015) applied contingency theory to examine the influence of three contingency factors on the use of SCM tools in Lithuanian companies. The research revealed that the frequency of SCM usage is higher in companies experiencing intense competition and those employing strategic approaches. However, company size was not found to be a determining factor for SCM usage. The authors also identified obstacles to SCM adoption in Lithuania, including undefined financial accounting approaches to strategic decision-making, lack of knowledge, production process overheads, and limited IT resources.

Study by Simons (1987), investigated the factors influencing the use of strategic management accounting in organizations. The study found that owners' participation was positively associated with the extent of use of strategic management accounting. When owners were actively involved in strategic decision-making processes, including setting strategic objectives, evaluating alternative strategies, and monitoring strategic performance, the organization was more likely to adopt and utilize strategic management accounting practice effectively. Study by Hoque and James (2000): This research explored the impact of owners' participation on the use of strategic management accounting techniques in manufacturing firms. The findings indicated that owners' participation was positively related to the extent of use of strategic management accounting. When owners were actively engaged in strategic decision-making activities, such as evaluating investment opportunities, analyzing market trends, and making strategic choices, the organization demonstrated a higher extent of utilizing strategic management accounting techniques for strategic planning and control.

Study by Roslender and Hart (2003) examined the factors influencing the use of strategic management accounting techniques in manufacturing companies. The findings revealed that owners' participation was positively associated with the extent of use of strategic management accounting. When owners actively participated in strategic decision-making processes, such as formulating business strategies, identifying competitive advantages, and monitoring strategic

performance, the organization exhibited a higher extent of utilizing strategic management accounting techniques for aligning financial and non-financial measures with strategic objectives. When owners or top management actively participate in strategic decision-making processes, set strategic goals, evaluate strategic alternatives, and monitor strategic performance, the organization is more likely to adopt and utilize strategic management accounting practice effectively. Their involvement demonstrates a commitment to strategic planning and control and the importance placed on aligning financial information with the organization's strategic objectives. Understanding the functional relationship between owners' participation and the extent of use of strategic management accounting can help manufacturing companies recognize the significance of owner involvement in strategic decision-making processes. It emphasizes the importance of fostering a culture of active participation and collaboration between owners and other stakeholders to leverage strategic management accounting effectively for strategic planning, control, and performance evaluation. Study by Hoque and James (2000) explored the role of information technology in strategic management accounting practice in manufacturing companies. The findings indicated that the use of IT tools, such as decision support systems and data analytics software, positively influenced the extent of use of strategic management accounting techniques. IT-enabled systems provided integrated platforms for data management, scenario planning, and strategic analysis, enabling organizations to align financial information with strategic objectives. Soin et al. (2016) examined the impact of IT on strategic management accounting practice in manufacturing organizations. The findings revealed that organizations with sophisticated IT infrastructure and strategic management accounting software exhibited a higher extent of use of strategic management accounting techniques. IT-enabled systems facilitated data integration from various sources, advanced analysis techniques, and real-time access to strategic information, leading to improved strategic decision making. However, these prior studies suggest that owners' participation, size, age, ICT expansion has a positive influence on the extent of use of strategic management accounting in manufacturing companies.

7.4.3 Budgeting and Contingent Factors

Contingency theory is an approach that examines how various factors influence the design and functioning of organizations (Islam and Hu, 2012). It recognizes that different organizational structures are suitable for different organizations, and the effectiveness of an organization depends

on the fit between factors such as technology, environmental volatility, organization size, structure features, and information systems. Therefore, contingency theory suggests that organizational outcomes are a result of the fit between two or more factors (Islam & Hu, 2012). Weber (1947) argues that contingency theory applies to both private and public sector organizations. In the field of management accounting, Hofstede (1967) found that economic, technological, and sociological considerations significantly impact budgeting systems. Hopwood (1974) also noted the inseparable and interdependent relationship between the design of a budgeting system and the organizational structure. According to Otley (1980), a contingency theory needs to identify particular accounting system components linked to particular situations and show how they are a good fit. Leavitt (1972) suggests that organizational tasks involve the interaction of the task itself, people, environment, structure, and technology.

Contingency theory has been used in several researches to explain budget-related events (Sharma, 2002; Haldma & Laats, 2002; Hansen & Van der Stede, 2004). According to research by Bruns and Waterhouse (1975) on the connection between organizational structure and budgeting, management behavior with regard to the budget is influenced by elements including centralization, autonomy, and the degree of structured activities. In their 1990 study, Brownell and Merchant looked at how departmental performance and budget participation were related, as well as how standardization or automation of production affected these relationships. Roos (1995) examined the impact of environmental uncertainty and job tension on the emphasis placed on budgets for performance evaluation. When departments are departmentalized, differentiation strategies are pursued, job-shop production is used, and organizations are operating in competitive environments, Hansen and Van der Stede (2004) found that budgets are used for strategy formulation. A model that Collin et al. (2007) explored examined how external variables such as the environment, organizational traits, and management control systems affected budget functionality, particularly in terms of the duties of coordination and assessment. They found evidence that coordination of the budget, driven by external factors like turbulence and competitive intensity, was the most important characteristic.

Shields and Young (1991) investigated the relationship between organization size and the extent of use of traditional budgeting in manufacturing firms. They found that larger organizations tend to have more formalized budgeting processes and a higher extent of budget utilization compared

to smaller organizations. The study suggested that larger organizations have more resources, complex operations, and a greater need for formalized planning and control mechanisms, which drive the adoption and use of budgeting practice.

Sandahl and Sjöström (2012) explored the relationship between organization size and the extent of use of beyond-budgeting practice in manufacturing companies. The findings indicated that larger organizations were more likely to adopt and utilize beyond-budgeting practice, which focus on decentralized decision-making and flexible resource allocation. The study suggested that larger organizations with diverse business units and complex structures benefit from the flexibility and adaptability provided by beyond-budgeting. Hansen et al. (2003), examined the adoption and utilization of budgeting practice in manufacturing firms and found a positive relationship between organization size and the extent of budget use. The study highlighted that larger organizations have more formalized budgeting processes, greater resources for budget implementation, and a higher emphasis on financial control and planning.

Study by Chenhall and Langfield-Smith (1998), the researchers investigated the factors influencing the design and use of budgeting systems in manufacturing firms. The study found that owners' participation was positively associated with the extent of budgeting system utilization. When owners were actively involved in the budgeting process, including setting targets, providing guidance, and monitoring progress, the organization was more likely to adopt and utilize budgeting systems effectively. Otley and Pollanen (2000), explored the impact of owners' participation on budgetary control practice in manufacturing firms. The findings indicated that owners' participation was positively related to the extent of budgeting system utilization. When owners were actively engaged in the budgeting process, such as reviewing budgets, challenging assumptions, and making resource allocation decisions, the organization exhibited a higher extent of using budgeting systems for financial planning and control. Study by Malmi and Brown (2008) examined the factors influencing the use of budgeting and performance measurement systems in manufacturing firms. The findings revealed that owners' participation was positively associated with the extent of budgeting system utilization. When owners were actively involved in the budgeting process, including participating in budget discussions and providing input, the organization demonstrated a higher extent of utilizing budgeting systems for decision making and performance evaluation. In addition, Study by Ferreira and Otley (2009) was investigated the

factors influencing the use of budgeting systems in organizations. The study found that staff qualification was positively associated with the extent of use of budgeting systems. Manufacturing companies with employees who had higher educational qualifications and technical skills in finance, accounting, and data analysis demonstrated a higher extent of utilizing budgeting systems for planning, control, and resource allocation. Hoque (2004), explored the impact of staff qualification on the use of budgeting systems in manufacturing firms. The findings indicated that staff qualification was positively related to the extent of use of budgeting systems. Companies with employees possessing higher levels of education, analytical skills, and industry-specific knowledge were more likely to adopt and utilize budgeting systems effectively for financial planning, performance evaluation, and decision making. Moreover, owners or top management actively participate in the budgeting process, provide guidance, monitor progress, and make resource allocation decisions, the organization is more likely to adopt and utilize budgeting systems effectively. Their involvement demonstrates a commitment to financial planning, control, and decision-making processes. Understanding the functional relationship between owners' participation and the extent of use of budgeting systems can help manufacturing companies recognize the importance of owner involvement in the budgeting process. It emphasizes the significance of fostering a collaborative and participatory budgeting culture, where owners and other stakeholders work together to develop realistic budgets, allocate resources effectively, and monitor financial performance.

Study by Ferreira and Otley (2009) investigated the impact of information technology on budgeting practice in organizations. The study found that companies with advanced IT infrastructure and budgeting software exhibited a higher extent of use of budgeting systems. IT-enabled budgeting systems facilitated accurate and timely data collection, integration with other systems, and enhanced analytical capabilities, leading to improved budgeting processes and decision making. Hall (2008) explored the role of information technology in budgeting practice in manufacturing firms. The findings indicated that the use of IT tools, such as enterprise resource planning (ERP) systems, positively influenced the extent of use of budgeting systems. ERP systems provided integrated platforms for data management, automation of budgeting processes, and real-time access to financial information, leading to improved budgeting practice and financial control. Hoque (2004) examined the impact of IT on budgeting practice in manufacturing

companies. The findings revealed that organizations with sophisticated IT infrastructure and budgeting software exhibited a higher extent of use of budgeting systems. IT-enabled budgeting systems facilitated data aggregation, analysis of financial trends, and scenario planning, enabling more accurate and informed budgeting decisions.

However, the results of these studies indicate that the budget process aligns with environmental contingencies. Depending on the specific contingency factors faced by a company, the budgeting process exhibits certain characteristics that promote better alignment, thereby reflecting organizational performance. In general, these prior studies suggest that larger manufacturing companies tend to have a higher likelihood of adopting and utilizing budgeting practice due to their complexity, resource availability, and the need for formalized planning and control. Overall, these prior studies suggest that owners' participation, stuff qualification, age, size and ICT use has a positive influence on the extent of use of budgeting systems in manufacturing companies.

7.4.4 Performance Evaluation & Contingency Factors

Contingency theory suggests that there is no universally applicable performance management (PM) system that works for all organizations in all circumstances. Instead, the effectiveness of a PM system depends on specific organizational and contextual factors (Otley, 1980; Rejc, 2004; Ferreira and Otley, 2005). Numerous studies have found a positive relationship between organizational size and PM (Zimmerman and Stevens, 2006; Thomson, 2010; LeRoux and Wright, 2010; Carman, 2007). Organizational structure is another contingency factor that has been positively associated with the adoption of PM systems (Ferreira and Otley, 2010; Chenhall, 2007). Additionally, organizational structure has close connections with organizational strategy (Brown and Iverson, 2004), performance measurement (Poole et al., 2001), and organizational success (Kushner & Poole, 1996).

Organizational leadership, PM, and effectiveness have all been linked in previous studies (LeRoux and Wright, 2010; Moynihan and Ingraham, 2004; Teelken, 2008; Wadongo et al., 2010). In order to face PM issues brought on by changes in the external environment, particularly in the third sector, effective leadership is essential (Alexander et al., 2010). According to Teelken (2008), Julnes and Holzer (2001), Thomson (2010), Duke and Edet (2012), and others, organizational

culture affects leadership, organizational effectiveness, and performance evaluation. Technology is the means through which an organization's work processes, comprising materials, equipment, tools, human labor, software, and knowledge, convert inputs into outputs. From a contingency standpoint, technical complexity, task unpredictability, and technological dependency are the sorts of technology that affect the adoption and use of PM systems (Chenhall, 2007). Information technology (IT) includes modern communication technologies, the use of specialized software, operations automation at the operational level, and IT applications at the IT application level. Past research (Poole et al., 2001; Pasupathy & Medina-Borja, 2008) has proven a link between size, IT, strategy, and organizational effectiveness. Information and communication technology has been recognized as being essential for the deployment of PM systems because it can help or hinder data collecting and subsequent performance monitoring. The degree of adoption, however, is influenced by company size, resources allotted, and goal alignment (Finn et al., 2006). However, atudy by Ittner and Larcker (2003) investigated the impact of IT on performance measurement practice in manufacturing firms. The study found that companies with advanced IT infrastructure and performance measurement software exhibited a higher extent of use of performance measurement systems. IT-enabled performance measurement systems facilitated accurate and timely data collection, integration with other systems, and enhanced analytical capabilities, leading to improved performance measurement and decision making. Agha and Abbasi (2016) explored the role of information technology in performance measurement practice in manufacturing companies. The findings indicated that the use of IT tools, such as business intelligence systems and data analytics software, positively influenced the extent of use of performance measurement systems. IT-enabled performance measurement systems provided integrated platforms for data management, visualization of key performance indicators, and real-time access to performance information, leading to improved performance monitoring and control. Wu and Olson (2009) examined the impact of IT on performance measurement practice in manufacturing organizations. The findings revealed that organizations with sophisticated IT infrastructure and performance measurement software exhibited a higher extent of use of performance measurement systems. IT-enabled performance measurement systems facilitated data aggregation, analysis of performance trends, and benchmarking, enabling more accurate and informed performance evaluation and decision making.

Study by Ferreira and Otley (2009) explored the impact of staff qualification on the use of performance measurement systems in organizations. The findings indicated that staff qualification was positively related to the extent of use of performance measurement systems. Companies with employees possessing higher levels of education, analytical skills, and industry-specific knowledge were more likely to adopt and utilize performance measurement systems effectively for setting performance targets, tracking progress, and aligning performance with strategic objectives. Chenhall and Langfield-Smith (1998) examined the factors influencing the use of performance measurement systems in manufacturing companies. The findings revealed that staff qualification was positively associated with the extent of use of performance measurement systems. Organizations with employees possessing higher levels of education, accounting qualifications, and analytical skills demonstrated a higher extent of utilizing performance measurement systems for performance evaluation, incentive alignment, and decision making. Study by Ittner and Larcker (2003), investigated the adoption and use of performance measurement systems, including the use of non-financial measures, in manufacturing firms. The findings revealed that larger organizations tend to have more formalized performance evaluation systems, including the use of multiple performance measures and the integration of financial and non-financial indicators. The study attributed this relationship to the greater complexity and need for more comprehensive performance measurement in larger organizations. Otley and Pierce (1995), examined the use of management control systems, including performance evaluation systems, in manufacturing companies. The findings indicated that larger organizations were more likely to have formalized performance evaluation systems with multiple measures and the use of targets or budgets. The study suggested that larger organizations require more structured performance evaluation to align the activities of various divisions or business units. Simons (1995), explored the use of control systems, including performance evaluation systems, in manufacturing firms. The findings suggested that larger organizations tend to utilize more sophisticated performance evaluation systems, such as balanced scorecards, due to their greater resources and complexity. The study highlighted the importance of aligning performance measures with organizational strategies and objectives. Ittner and Larcker (2003) also investigated the factors influencing the use of performance measurement systems in manufacturing firms. The study found that owners' participation was positively associated with the extent of performance evaluation system utilization. When owners were actively involved in the performance evaluation process, including

setting performance measures, reviewing results, and providing feedback, the organization was more likely to adopt and utilize performance evaluation systems effectively. Widener (2007), explored the impact of owners' participation on performance measurement practice in manufacturing firms. The findings indicated that owners' participation was positively related to the extent of performance evaluation system utilization. When owners were actively engaged in performance measurement activities, such as defining performance criteria, analyzing variances, and making decisions based on performance data, the organization demonstrated a higher extent of using performance evaluation systems for assessing and rewarding performance. Study by Malmi and Brown (2008): The researchers examined the factors influencing the use of performance measurement and management systems in manufacturing firms. The findings revealed that owners' participation was positively associated with the extent of performance evaluation system utilization. When owners actively participated in the performance evaluation process, such as reviewing performance reports, discussing results with managers, and taking action based on performance information, the organization exhibited a higher extent of utilizing performance evaluation systems for performance improvement and accountability.

Overall, these prior studies suggest that owners' participation, size, age, ICT use, stuff qualifications have a positive influence on the extent of use of performance evaluation systems in manufacturing companies. When owners or top management actively participate in the performance evaluation process, set performance targets, review results, and make decisions based on performance outcomes, the organization is more likely to adopt and utilize performance evaluation systems effectively. Their involvement demonstrates a commitment to performance management and the importance placed on assessing and improving organizational performance. Understanding the functional relationship between owners' participation and the extent of use of performance evaluation systems can help manufacturing companies recognize the significance of owner involvement in performance-related decision making. It emphasizes the importance of fostering a culture of active participation and collaboration between owners and other stakeholders to leverage performance evaluation systems effectively for performance measurement, analysis, and improvement.

7.4.5 Decision Making System and Contingency Factors

An essential component of organizational management is the interplay between a decision-making system and contingency elements within a company. Contingency considerations are the particular internal and external variables that have an impact on how well an organizational system is designed and implemented. The size, composition, strategy, technology, volatility of the environment, and other contextual aspects of the company can all be considered. A firm's decision-making system includes the procedures, instruments, and methods applied to both strategic and operational decisions made within the company. It involves the information flow, the power to make decisions, and the structure for analyzing and putting those decisions into action. The interaction between the decision-making system and contingency factors involves aligning the decision-making process with the specific needs and characteristics of the organization. Here are a few examples of how this interaction may occur: Organizational size, a large organization may have a more complex decision-making system that involves multiple layers of management and formalized procedures. In contrast, a smaller organization may have a more informal and decentralized decision-making process. The decision-making system needs to be designed and adapted to accommodate the size of the organization and its associated decision-making needs. Organizational structure, the decision-making system should be aligned with the structure of the organization. For example, in a centralized structure, decisions are made at the top levels of management, while in a decentralized structure, decision-making authority is delegated to lower levels. The decision-making system should support the flow of information and decision-making processes based on the organization's structure. Organizational strategy, the decision-making system should be aligned with the strategic goals and priorities of the organization. Different strategies may require different decision-making approaches. For example, a company pursuing a cost leadership strategy may have a decision-making system that focuses on efficiency and cost control, while a company pursuing a differentiation strategy may emphasize creativity and innovation in decision-making. Technological environment, the decision-making system should take into account the technological capabilities and requirements of the organization. Advances in information technology can enable more efficient and data-driven decision-making processes. Integrating technology into the decision-making system can enhance communication, information sharing, and analysis of relevant data. Study by Chenhall (2003) investigated the adoption of contemporary management accounting practice, including the use of information for decision making, in manufacturing firms. The findings indicated that larger organizations were more likely

to utilize information for decision making, including non-financial information, due to their greater complexity and need for comprehensive decision support. Study by Ittner and Larcker (2001) examined the adoption of activity-based costing (ABC) in manufacturing firms. The study found a positive relationship between organization size and the extent of ABC implementation, indicating that larger organizations were more likely to utilize ABC to obtain more accurate and detailed information for decision making. The relationship between organization size and the use of information technology for decision making in manufacturing firms. The findings suggested that larger organizations were more likely to adopt and utilize information systems that provide timely and accurate information to support decision making, due to their greater resources and complex decision environments (Anderson et al., 2002). Study by Daft and Macintosh (1984) investigated the use of information systems for decision making in manufacturing firms. The study found that older organizations tend to have more established information systems and a higher extent of information utilization for decision making. The researchers suggested that older organizations have had more time to develop and refine their information systems, enabling them to make more informed decisions. The findings indicated that older organizations were more likely to utilize management accounting information in decision making, including financial and non-financial information. The study suggested that older organizations have accumulated knowledge, experience, and established systems for gathering and analyzing information, leading to more informed decision making (Raghunandan & Rama, 2013) Study by Papulova and Mojzisova (2011), examined the utilization of management accounting information in decision making in small and medium-sized manufacturing enterprises. The findings indicated that older organizations tend to have a higher extent of utilization of management accounting information, such as cost information, in their decision-making processes. The study suggested that older organizations have established routines and systems for accessing and analyzing information, contributing to more effective decision making.

In conclusion, aligning the decision-making processes, structures, and approaches with the distinctive qualities and requirements of the organization is necessary for the interaction between a decision-making system and contingency factors. Organizations can improve the effectiveness and efficiency of their decision-making systems by taking these contingency variables into account

and responding to them. Owners' participation, stuff qualification, age, size and ICT use has a positive impact on firm's decision making system.

7.5 Empirical Results and Discussion

7.5.1 Methodology

This section has been considered management accounting practice (MAP) used as dependent variable and age of the company (AGC), size of the company (ORGS, log of total asset), qualified stuffs (QUL), uses of technology (TEC) and ownership practice (ONP) of the manufacturing firms are used as independent variable to estimate a multivariate regression model. Descriptive research estimate the descriptive statistics of the variables and ANOVA test also estimate to determine the relation among the variables.

7.5.2 Contingent Factors on Extent Use of MAP

Size Influence the Extent of the Use of MAP

Table 7.1 summarizes perceptions of the participation of the company's size towards the extent of the use of MAP in their firms. Respondents were required to indicate their perceptions of the company's size to the extent of the use of MAP on a five-point Likert scale (1 is very low extent to 5 very large extent). The results indicate that more than 50% of the responding firms report a medium extent and over 25% perceived a large or very large extent. The mean value of the estimation of company size 3.0641. Therefore, the respondent's perception was company's size are moderately supportive to influence the extent of the use of MAP in their firms.

Table 7.1: Organization's Size Influence the Extent of the Use of MAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low Extent	3	3.8	3.8	3.8
	Low Extent	12	15.4	15.4	19.2

	Medium Extent	42	53.8	53.8	73.1
	Large Extent	19	24.4	24.4	97.4
	Very Large Extent	2	2.6	2.6	100.0
	Total	78	100.0	100.0	
Mean	3.0641				

Table 7.2: Frequency Distribution of Size

Size (Log of total asset)		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	3.8	3.8	3.8
	2.00	74	94.9	94.9	98.7
	3.00	1	1.3	1.3	100.0
	Total	78	100.0	100.0	

Table 7.3: Descriptive Statistics of Size

	N	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
size	78	1.00	3.00	1.9744	.02564	.22646	.051	-1.945	.272	17.222	.538

Table 7.3 state the demonstrate that the standard deviation of the variable size (log of total asset is 0.22646 and the variance is 0.51. Skewness of the variable is -1.945 and kurtosis value is 0.538. Estimated standard error is 0.02564.

Age of the Company Influence Extent of the Use of MAP

Table 7.4 shows the age of the company or the years of operations where 28.2% of the response company has years of operation more than 25 years, 24.4% of the respondent companies have been operated since 5 years, 15.4% are 21-25 years. Most of the respondent company is matured due to years of operations.

Table 7.4: Age of the Company or the Years of Operations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5 Years	19	24.4	24.4	24.4
	6-10 Years	16	20.5	20.5	44.9
	11-15 Years	5	6.4	6.4	51.3
	16-20 Years	4	5.1	5.1	56.4
	21-25 Years	12	15.4	15.4	71.8
	More than 25 Years	22	28.2	28.2	100.0
	Total	78	100.0	100.0	

Table 7.5 summarizes perceptions of the participation of the company's age towards the extent of the use of MAP in their firms. Respondents were required to indicate their perceptions of the company's age to the extent of the use of MAP on a five-point Likert scale (1 is very low extent to 5 very large extent). The results indicate that more than 50% of the responding firms report a low or very low extent and over 40% perceived a moderate or greater participation. The mean value of the estimation of company age 2.5256. Therefore, the respondent's perception was company's age generally are not supportive to influence the extent of the use of MAP in their firms.

Table 7.5: Age of the Company Influence the Extent of the Use of MAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low Extent	1	1.3	1.3	1.3
	Low Extent	43	55.1	55.1	56.4
	Medium Extent	26	33.3	33.3	89.7
	Large Extent	8	10.3	10.3	100.0
	Total	78	100.0	100.0	

Mean	2.5256				

Therefore, most of the respondent companies are matured where their perception that company's age generally is not supportive to influence the extent of the use of MAP in their firms.

Ownership Practice Influence the Extent of the Use of MAP

Table 7.6 summarizes perceptions of the participation of the owner/manager towards the development of MAP in their firms. Respondents were required to indicate their perceptions of the participation of the owner/manager to the development of MAP on a five-point Likert scale (1 is very low extent to 5 very large extent). The results indicate that 80% of the responding firms report a high extent or very high extent of owner/managers participation and over 95% perceived a moderate or greater participation. Therefore, owner/managers in the respondent firms are generally supportive of MAP in their firms. The mean value of the estimation of ownership practice 3.9231. Here, the impact of large extent to ensure the use of MAP is greater than any other likert scale.

Table 7.6: Ownership Practice Influence the Extent of the Use of MAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low Extent	1	1.3	1.3	1.3
	Medium Extent	8	10.3	10.3	11.5
	Large Extent	64	82.1	82.1	93.6
	Very Large Extent	5	6.4	6.4	100.0
	Total	78	100.0	100.0	
Mean	3.9231				

Overall, owner managers reported the presence of a moderate level of the participation by owners/managers concerning the development of MAP. The varied participation by owner/manager might well produce different effects on the use of MAP.

Qualified Accounting Personnel Influence the Extent of the Use of MAP

The profile of the questionnaire sought information as to accounting staff employment and the highest qualification held by the accounting staff. The education qualifications of the respondent and the years of experiences has been presented in Table 7.7, there are some categories the degrees such as BBA, MBA or ACA or CMA, BSC, MSS and FCA or CA or CFO. The respondent has qualification with years of experiences, the numbers of respondent who have completed only BBA & MBA with 1-10 years' experience is 2, and 11-15 years of experience is 1. The numbers of respondent who have completed ACA or CMA with 1-10 years' experience is 4, and 11-15 years of experience is 5,16-12 years of experience is 11 and 21-30 years of experience is 5. The highest group of the respondents has qualifications FCA or CA. The numbers of respondent who have completed only FCA or CA with 1-10 years' experience is 11, 11-15 years of experience is 15,16-12 years of experience is 12 and 21-30 years of experience is 10. Total numbers of respondents is 48 who have educational qualifications FCA or CA.

On the assumption that a bachelor degree or ACCA/CIMA qualification would make an accountant highly qualified. Overall, these results indicate that majority responding firms employ their CFO who is well qualified.

Table 7.7: Qualifications and Years of Experience of the Respondents

		Years of Experience				Total
		1-10	11-15	16-20	21-30	
Qualifications	BBA & MBA	2	1	0	0	3
	ACCA or CIMA	4	5	11	5	25
	MSS	0	0	1	0	1
	BSC	1	0	0	0	1
	FCA or CA or CFO	11	15	12	10	48
Total		18	21	24	15	78

Source: Field Survey 2023

Table 7.8 summarizes perceptions of the qualified stuffs influence the extent of the use of MAP in their firms. Respondents were required to indicate their perceptions of the qualified stuffs influence the extent of the use of MAP on a five-point Likert scale (1 is very low extent to 5 very large extent). The results indicate that, 59.0% of the respondent said that qualified stuffs influence the extent of the use of MAP as large extent, 34.6% as medium extent and 5.1% low extent. The mean value of the qualified stuffs influence was 3.5128**.**

Table 7.8: Qualified Stuffs Influence the Extent of the Use of MAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low Extent	1	1.3	1.3	1.3
	Low Extent	4	5.1	5.1	6.4
	Medium Extent	27	34.6	34.6	41.0
	Large Extent	46	59.0	59.0	100.0
	Total	78	100.0	100.0	
Mean	3.5128				

Overall, more than 80% of firms employ qualified accounting staff. The existence of this pool of qualified internal accountants probably plays an important role in the development of management accounting which is supported the previous study (McChlery et al., 2004). This finding then might account for the high uptake of many accounting practice in responding firms especially regarding the use of basic techniques of accounting.

Use of Information Technology Influence the Extent of the Use of MAP

Table 7.9 summarizes the Uses of Information Technology by respondent company. The result indicates that 91% of the respondent company response that they have been used technology, and only 9% of the respondent company response that they have not use advanced technology to practice management accounting. Out of 78, around 71 companies have been practiced the advanced technology in the operations to grain more profit to accelerate the financial performance.

Table 7.9: Uses of Information Technology Influence the Extent of the Use of MAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	7	9.0	9.0	9.0
	Yes	71	91.0	91.0	100.0
	Total	78	100.0	100.0	

Table 7.10 summarizes perceptions of the participation of the use of Information technology influence the extent of the use of MAP in their firms. Respondents were required to indicate their perceptions of the use of information Technology Influence the Extent of the Use of MAP on a five-point Likert scale (1 is very low extent to 5 very large extent). The results indicate that 43.6% of the respondents said use of information technology influence the extent of the use of MAP as large extent, 35.9% as medium extent where 14% respondent recognized it low or very low extent. The mean value of the use of information technology 3.4103.

Table 7.10: Use of Information Technology Influence the Extent of the Use of MAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low Extent	1	1.3	1.3	1.3
	Low Extent	10	12.8	12.8	14.1
	Medium Extent	28	35.9	35.9	50.0
	Large Extent	34	43.6	43.6	93.6
	Very Large Extent	5	6.4	6.4	100.0
	Total	78	100.0	100.0	
Mean	3.4103				

Overall the result shows a fairly extensive use of advanced information technology by responding firms. The high utilization of modern technology might encourage the extensive use of MAP among the responding firms.

However, the overall importance of contingent factors estimated by mean value where the benchmark category of the mean value is 3.00 to shows the extent use. Here, the highest mean value is 3.9231 for ownership practice as contingent factors to determinate MAP. Second mean value is 3.5128 for qualified stuffs that indicated that use of contingent factors to measure influence on MAP. Highest use of contingent factors is ownership practice and second importance is qualified stuffs and lowest mean value 2.5256 for age of the company as a contingent factors.

7.5.3 Multivariate Regression Output Regarding Contingent Factors impact on Extent Use of MAP

Multiple linear regression is a method of analysis for assessing the strength of the relationship between each of a set of explanatory variables (sometimes known as independent variables, although this is not recommended since the variables are often correlated), and a single response (or dependent) variable. In this study, the extent of use of MAP is assumed to be explained by some other variables and multiple regression is used aptly as an important statistical technique to conclude the explanatory power of different variables in explaining the extent of use of MAP. Applying multiple regression analysis to a set of data results in what are known as regression coefficients, one for each explanatory variable. These coefficients give the estimated change in the response variable associated with a unit change in the corresponding explanatory variable, conditional on the other explanatory variables remaining constant.

A strict interpretation of the requirements for using linear regression analysis is that both the dependent and independent variable should be measured on an interval or ratio scale, although categorical measures can be used for independent variables if appropriate indicator (dummy) variable coding schemes are used. However, there are many statisticians (e.g. Bryman and Cramer, 1999; Miles and Shevlin, 2001) who argue that ordinal scales provide a suitable approximation to interval scales and, therefore, a linear regression model can be used. Also many management accounting researchers (Sheilds, 1995; Guilding, 1999; Hoque, 2000a; Hoque, 2000b) have used

multiple regression models to test hypotheses where both the dependent and independent variables are measured on ordinal scales.

Table 7.11 presents the results of the regression analysis. The fit of a multiple regression model can be judged in various ways, for example, calculation of the multiple correlation coefficients or by the examination of residuals. The table includes some statistics to specify the fit of the model. A measure of the fit of the model is provided by the multiple correlation coefficients, *R*, defined as the correlation between the observed values of the response variable and the values predicted by the model. The value of R^2 gives the proportion of the variability of the response variable accounted for by the explanatory variables. The table includes the multiple correlation coefficient, R , its square, R^2 , and an adjusted version of this coefficient as summary measures of model fit. The multiple correlation coefficient R=0.593 indicates that there is a medium correlation between the observed extent of the use of MAP and those predicted by the regression model. In terms of variability in observed accounted for by our fitted extent of the use of MAP model, this amounts to a proportion of R^2 =0.351, or 35.1%. Since by definition R^2 will increase when further terms are added to the model even if these do not explain variability in the population, the *adjusted* R^2 is an attempt at improved estimation of R^2 in the population. The index is adjusted down to compensate for chance increases in R^2, with bigger adjustments for larger sets of explanatory variables.

Here, there are five contingent factors such as: AGC= Age of the company or the years of operations; ORGS=Size of the company, natural log (Ln) of total assets, known as market share of the company; QUL = Qualified accounting personnel influence the extent of use of MAP; ONP= The ownership practice of MAP and TEC= The uses of information technology in MAP, those factors have been evaluated to determine the extent of MAP in manufacturing companies in Bangladesh.

Table 7.11: Value of R Square and F-Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Decision
					R Square Change	F Change	df1	df2	Sig. F Change	F Statistics Significant and Acceptable
1	.593[a]	.351	.306	.70322	.351	7.792	5	72	.000	

In summary, Table 7.11 has presented model fit evidence where value of R is 0.593 and R^2 is 0.351 which are presented the goodness of fit of estimated model. Adjusted R Square value is 0.306 and value of R square Change is 0.351. F statistics is 7.792 that are significant at 1% level. Table 7.12 shows the *Spearman's* correlation between the variables.

Table 7.12: Spearman's Correlations

	QUL	TEC	ONP	RGS	AGC
QUL	1.000000				
TEC	-0.065108	1.000000			
ONP	0.151057	0.392729	1.000000		
RGS	0.088571	0.150420	0.115455	1.000000	
AGC	0.157238	-0.166538	-0.064803	0.277199	1.000000

Table 7.13: ANOVA[a] Test

Model		Sum of Squares	Df	Mean Square	F	Sig.	Decision
1	Regression	19.267	5	3.853	7.792	.000[b]	F Statistics Significant and Acceptable
	Residual	35.605	72	.495			
	Total	54.872	77				
a. Dependent Variable: Extent Use of Management Accounting Practice							
b. Predictors: (Constant), QUL, ORGS, AGC, TEC, ONP							

Table 7.13 has been presented the result of ANOVA test where the model has F-statistics 7.792 and it is significant at 1% level with a Mean Square value 3.853. In addition, sum of square value was estimated 19.267. The probability value of the estimated F statistics is acceptable and significant at 1% level.

Table 7.14: Regression Output of Contingent Factors on MAP

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.273	.777		-.351	.727					

	ONP	.422	.102	.421***	4.113	.00	.476	.436	.391	.860	1.162
	QUL	-.039	.024	-.159*	-1.635	.10	-.110	-.189	-.155	.953	1.049
	AGC	.043	.040	.103	1.063	.29	-.003	.124	.101	.958	1.044
	RGS	.082	.067	.117	1.224	.225	.100	.143	.116	.993	1.007
	TEC	.848	.299	.289***	2.833	.00	.421	.317	.269	.866	1.155

Note*: * denote 10% level of significance (p<0.10) and *** denote 1* level of significance (p<0.01)*

The regression output of the multivariate regression model has been presented in Table 7.14. As per the regression analysis, the standardized beta coefficient of owner's participation is computed as 0.421(p<.01). Four of the five variables show positive relationship and one shows negative relationship. As Qualified accounting personnel result a negative coefficient, they will not be a right predictor of the extent of use of MAP.

Table 7.5: Durbin Watson Statistics

Estimated Durbin-Watson (DW)	Criteria	Decision
2.036	DW>1	Acceptable

Estimated Durbin-Watson (DW) value is 2.036, which is greater than 1.00 (DW>1). Estimated DW value is acceptable and shows the fitness of the model. Collinearity Statistics by Tolerance value has been presented in Table 7.14 where the independent variables have the tolerance value in acceptable range. Estimated ToL value should be greater than 0.25 (ToL>0.25) otherwise it has chance to multicoliniarity problem. The variables age, size, ownership participation, qualified stuff and technology both have Tolerance value greater than 0.25, it has no co-linearity problem.

Collinearity statistics by VIF value has been presented in Table 7.14 where the independent variables have the VIF value in acceptable range. Estimated VIF value should be less than 4.0 (VIF<4.0) otherwise it has chance to multicoliniarity problem. The variables age, size, ownership

participation, qualified stuff and technology both have VIF value less than 4.0 and the result declare that it has no co-linearity problem.

Table 7.15 presented the results of residuals diagnostic where the mean value of the residual is zero and the standard residual value is also zero that are highly desirable in statistical analysis. Maximum value of the residual is 1.54508 and the minimum value of the residual was estimated -1.6043. Zero mean value of residual shows the strength of a linear regression model and it is an assumption of regression model.

Table 7.16: Residuals Statistics

	Minimum	Maximum	Mean	N	Criteria	Decision
Predicted Value	2.2100	4.2751	3.4103	78	Mean of Residual =0	Accepted
Residual	-1.60435	1.54508	.00000	78		
Std. Predicted Value	-2.399	1.729	.000	78		
Std. Residual	-2.281	2.197	.000	78		

However, the results have determined to make decision on developed hypothesis. There are five hypothesizes based on hypothesis 1, for this section based on contingent factors impact on MAP. Table 7.16 presents the results of hypothesis testing and decision regarding hypothesis one.

Table 7.17: Decision on Hypothesis

Hypothesis	**Coefficient Sign**	**Decision**
H1a: Size of the organization has positive and significant impact on MAP.	0.117	Coefficient sign Accepted (insignificant)
H1b: Years in operation has positive and significant impact on MAP.	0.103	Coefficient sign Accepted (insignificant)

H1c: Owner/manager's participation has positive and significant impact on MAP.	0.412	Coefficient sign Accepted (significant)
H1d: Qualification of accounting staff has positive and significant impact on MAP.	-0.159	Failed to Accept (Partially significant)
H1e: Information and communication technology has positive and significant impact on MAP.	0.289	Coefficient sign Accepted (significant)

However, these findings have been accepted the developed hypothesis H1a (insignificant), H2b (insignificant), H2c (significant), H2d (reject), and H2e (insignificant) to determine contingent factors.

7.7 Conclusion

Attainment of the extent of the use of MAP by firms is driven by different contingent factors. Management accounting practice throughout the world follow contingency framework as it is not mandated by law and the practice are not standardized like financial accounting. This study, based on the literature review, has identified five contingent factors that may influence the extent of use of MAP. The size, age, and years of operation of a company, along with the presence of qualified accounting personnel, ownership practice, and the use of technology are independent variables that have been assessed to determine their impact on the use of management accounting practice as the dependent variable. ORGS, ONP, TEC, and AGC positively influence management accounting methods, while QUL has a negative correlation. The analysis comes out with a very worrying picture that mostly all the factors except 'owner's participation' carry no significance in explaining the extent of use of MAP achieved by the firms. This finding is very important for understanding the business environment in Bangladesh.

First, the results reveal that the size of the firms (which is measured by the log value of Total assets) has a very small and positive association (0.117) with the use of management accounting practice. The results are supported with the earlier findings that the direction of association for MAP was positive as the larger firms make greater use of costing, budgeting, performance evaluation systems, information for decision-making and strategic management.

Second, the result shows that the age of the firms (which is measured by the years of the operation) has a small association with the use of MAP. Though the relationship is positive but the result is insignificant. These results provide some evidence of a relationship between age and the use of management accounting practice which is consistent with the earlier analysis (Kendall‘s tau). Overall the results suggest that the age of the firm has minimal impact on the adoption of management accounting practice in Bangladesh.

Thirdly, ownership practice is the key variables that have positive and significant impact on MAP. The sign of this variable is highly expected and the result is significant at 1% level. Practice of management accounting by the owners of the company helps to raise the firm’s performance and the large extent of MAP in manufacturing industries in Bangladesh.

The significance of owner’s participation parameter gives a new dimension to the study of the extent of use of MAP in a country like Bangladesh which is struggling with a mass of first-generation firms. As these firms are growing older, they are trying to perform professionally. This may be a good reason why owner’s influence the extent of the use of MAP. Other factors which theoretically demand the use of management accounting practice have been proved irrelevant in Bangladesh. Bangladesh still needs more maturity on some internal and external factors as considered in this study to spread the extent of the use management accounting practice.

Fourthly, the variable qualified stuffs used as an independent variable. The coefficient sign of this variable is negative that is unexpected. The qualified accounting personnel are working most of the times to carry out the owner’s order. They are working as a part of the rules and routines applicable to firms where the use of MAP is not significant. Thus, the study rightly concludes that the qualified accounting personnel doesn’t influence the extent of use of management accounting practice.

And finally, use of technology has positive impact on MAP and the result is significant. Here the coefficient sign of the variable technology is expected.

Management accounting procedures, including as cost analysis, budgeting, and performance evaluation, serve as crucial tools for satisfying the expectations and demands of actively involved owners. Furthermore, heightened ownership participation frequently results in a more dispersed decision-making framework inside firms. Owners who actively engage in management decisions may promote a more inclusive and collaborative approach to decision-making. Management accountants are essential in such settings since they provide vital financial data and analysis to assist decision-makers at different levels. Management accounting tools are utilized to evaluate the financial consequences of various actions, allowing owners and managers to make well-informed decisions that match with the aims of the firm. Participating in ownership can also foster a strong emphasis on long-term strategic planning. Owners that are actively involved and have a personal stake in the organization's success are more inclined to prioritize long-term strategic objectives rather than pursuing immediate profits. Moreover, engaging in ownership participation might result in heightened investments in technology and data analytics specifically in the field of management accounting. These technologies enable management accountants to deliver more precise and fast information for decision-making (Li et al., 2023). There is a mutually beneficial relationship between ownership participation and management accounting methods. As the level of ownership participation rises, there is a commensurate need for more advanced and efficient management accounting tools and methods (Hariyati et al., 2023). The adoption of management accounting practice that promote transparency, informed decision-making and strategic alignment is driven by committed owners who have a strong interest in the financial health and success of the organization. These practice are crucial for the sustainable growth and success of contemporary organizations.

Chapter 8

Performance Analysis

8.1 Introduction

Modern business management approaches deal with performance measurement, where performance plays a vital role in present business activities. To prevail in a worldwide contest, ventures need to acknowledge variation in conduct by shutting the hole between the endeavour and the business components by attempting to expand their efficiency and performance (Kádárová & Kádár, 2015). At the same time, it is essential to show authoritative advancement-centered development and improvement conduct while guaranteeing key arrangements. Thus, ventures 'serious administration approaches with the estimation of the endeavours' performances get needed, where the degree of competition on a worldwide scale rises consistently and cognizant buyer conduct gets to the next level. According to this point of view, fostering the internal administration ability of endeavours and guaranteeing their consistency with the business nature, performance of executives and estimation is significant for administrators. The presentation of an association has been, for the most part, alluded to as a proportion of how effective the association has performed in accomplishing its expected results. A survey of the writing by Strasser et al. (1981) has distinguished execution as multi-layered, and that is how much associations are achieving every one of the reasons they should. While "performance" has been much of the time alluded to in administration studies, there is by all accounts a fairly vague meaning of such a word in the writing (Lebas & Euske, 2007). Additionally, Lebas and Euske (2007) alluded to performance as a relevantly reliant construct, which can be deciphered through various comparable factors like viability, productivity, intensity, cost decrease, esteem production, long-haul endurance, and development. In such a manner, Kwarteng and Aveh (2018) brought up the idea that the ideas of objectives and objective accomplishment are not relevant to associations. The creators inspected the yearly execution of 75 protection deals by organizations for more than 11 years, utilizing a factor analysis model. They found that the variables of performance address the proceeding with the interaction of asset procurement as opposed to addressing the steady objectives of the associations. Subsequently, the producer considers authoritative performance to be an association's capacity to take advantage of its surroundings in the obtaining of scarce and

esteemed assets to support its work. In seeking a clear conceptual and operational definition of performance, a set of propositions have been outlined by Lebas and Euske (2007) as follows:

Table 8.1: Proposition of Financial Performance

Proposition 1	Performance is defined as a set of quantitative or qualitative indicators that illustrate the steps taken to achieve the desired results. The indicators are overlapping and possibly even at odds with one another;
Proposition 2	The performance measures should not be confused with the performance since they may only be a partial description of the performance;
Proposition 3	Performance is a dynamic process, not a static thing. A causal model that explains how current business procedures might result in potential outcomes in the future could be used to illustrate it;
Proposition 4	To reflect the rapidly evolving markets and technologies, the relevance of the causal model must be continuously validated from both inside and outside the organization;
Proposition 5	When referring to the signals of performance, the user defines performance as a social construct. It is open to judgment and interpretation and lacks an objective description;
Proposition 6	Both internal and external raters of performance might have different interpretations of performance. While internal evaluators consider performance in conjunction with other internal actors, external evaluators view organizational operations;
Proposition 7	Performance must be related to a responsibility area. A basis for understanding how to manage performance within an organization is provided by such an association;
Proposition 8	Performance needs to be able to be measured and described. As a result, it will be possible to communicate it and take appropriate action;

Proposition 9	Performance can be judged and interpreted, and it is a relative concept. Performance would only be significant if it were included in a comparison and its primary factors were examined and chosen by the users of the data.

According to Lebas and Euske (2007), performance is only important in the context of direction and the concept cannot be applied to all chiefs. Performance would therefore occur if there was a plan for the leaders both inside and outside the organization. Performance refers to the outcomes, accomplishments, and products of authoritative activities. A company's prosperity, conditions and consistence is estimated through performance. As per Fitzgerald (2000), the normal presumption which supports a large part of the performance exploration and conversation is that rising presentation prompts further developed capabilities and exercises of associations. Tidd, Bessant and Pavitt (2001) saw that in the present dynamic and all around the world, firm execution has become more appropriate, for the most part because of patterns in concentrated global contest, disconnected and testing markets as well as different and quickly evolving advancements. As per (2004), performance alludes to the measurements connecting with how a specific solicitation is taken care of, or the demonstration of performing; then again achieving something really; using data as perceived from just having it. According to Griffins (2006), the proportion of accepted or standard measures of viability, competence, and natural obligation, such as process duration, efficiency, squander reduction, and administrative consistency, is what determines a firm's performance. As per Rickard and Kono (2013), authoritative performance envelops three explicit areas of firm results which incorporate *"(1) financial performance (benefits, return on resources, profit from venture, and so on); (2) market performance (deals, portion of the overall industry, and so on); and (3) investor return (complete investor return, financial worth added, and so on).*" It is impossible to ignore the impact that manufacturing has on each nation's economy, but in order for these assembly companies to perform better, MAP that lead to better activities are crucial. According to Horngren et al. (2009), MAP are thought to be essential for the association's success. One of the main forces behind industrialization is the manufacturing sector. Strong MAP are unquestionably a way for assembling firms to move toward the challenges of competition, change, and costing in order to further develop performance (Horngren et al. &. Ittner, 2009). According to Gichaaga (2013)'s review, MAP and methods assist the board of associations, including

manufacturing firms, in designing, directing, and controlling operating expenses and achieving ideal performance.

8.2 Perspectives of Performance

Organizational performance is inherently unobservable, but a variety of performance metrics have been employed to evaluate the results of organizational activities. Many different performance dimensions are included in the common policies, such as accounting returns, performance in the stock market, operational efficiency, and growth within an organization.

While trying to look for explanation of authoritative performance, Hamann, et al. (2013) has investigated nearly 19 markers utilized in around 5,000 US recorded organizations north of a 21-years time span. As per their develop legitimacy study, there was proof of four components of hierarchical performance, in particular financial exchange performance, development, benefit and liquidity. As per Hamann, et al. (2013), the financial performance aspect shows the progressions in the market impression of an association's worth and the correlation between market worth and book esteem. The development aspect alludes to changes in AC results and the size of associations. In the interim, the benefit aspect demonstrates the productivity of an association to use its assets to create pay, while the liquidity aspect alludes to an association's capacity to meet its monetary commitments in view of incomes created from its ongoing activities. In the mean time, the productivity aspect shows the proficiency of an association to use its assets to create pay, while the liquidity aspect alludes to an association's capacity to meet its monetary commitments in light of incomes produced from its ongoing activities. The effectiveness of hierarchies can be accessed from a variety of different angles. Numerous experts, including Minkman et al. (2007), Su et al. (2008), and others have adopted a financial perspective in their studies. Generally speaking, performance indicators from a financial perspective include metrics like gains, profits from speculation (return on initial capital investment), share of the action, etc. The literature has embraced a broader definition of business performance that encompasses financial execution, functional performance (FP), item quality, and various viewpoints that emphasize customer loyalty, employee resolve, representative development, and pie development (Terziovski & Samson, 1999).

Table 8.2: Performance Dimensions Measure

Performance Dimensions	Types of Measures
Competitiveness	Rank and relative market share Sales growth and customer base metrics.
Financial Performance	Profitability, Capital Structure, Liquidity, Market Rations, Ratios etc.
Quality of Service	Reliability, Responsiveness, Appearance, Cleanliness, Comfort, Friendliness, Communication, Courtesy, Competence, Access, Availability, Security etc.
Flexibility	Specification, Volume Flexibility, and Speed of Delivery Flexibility
Resource Utilization	Productivity, Efficiency, etc.
Innovation	Performance of individual innovations, Performance of the innovation process etc.

(Source: Brignall et al. 1991)

Each manufacturing business has the objective to be as productive, imaginative and adaptable as could be expected. A compelling manufacturing activity can keep up with its client's interest of more extensive scope of administrations and items, simultaneously its worker's prosperity with solid monetary markers and can adjust to the evolving climate. However unique manufacturing organizations have various goals and targets, it is pivotal to comprehend whether the organization is moving in the correct course to follow every one of the progressions occurring. Performance markers assist an association with arriving at its vital and strategic objectives in the long and short run. The utilization of performance markers assists associations with bettering comprehend what is going on and assist with assessing the viability of technique performance relying upon the ongoing conditions at some random time. Another memorable thing is that convincing pointers ought to be both quantifiable and critical - there should be a sensible cognizance what is assessed,

the status quo got done and what exercises can incite the improvement of the marker later on. Performance of an association can be estimated with different kinds of markers; these pointers could be arranged under monetary or non-monetary performance gauges, a portion of the performance pointers examined beneath.

8.2.1 Financial Performance (FP)

On account of the appraisal of the presentation of an undertaking, arising monetary outcomes draw in need over others. The primary mark of the progress of an endeavor, no matter what its size, is its FP. Performance estimates in light of accounting not entirely set in stone by “final operational performance” as opposed to “relative business performance.” Subsequently, those performance measures are utilized in assessing the last presentation of the endeavor overall. These actions simultaneously gives an open door to the evaluation of the performance of center and lower level directors, whose obligation is restricted to just a solitary segment or spot of production (Çelik, 2002). According to Mills et al. (2008), FP is an enticing proportion of how effectively a company can use resources from its core business model and generate incomes. This term is also used to describe a company's overall financial health over a specific period of time, and it can be applied to compare businesses in the same industry or to examine individual businesses or regions within a conglomerate. The presentation estimation concept demonstrates how employees can increase a company's value by increasing the size of future incomes, hastening the receipt of those incomes, or increasing production or safety (Cadbury, 2000). However, there are many ways to evaluate financial performance, but they should all be taken into account simultaneously. Financial performance indicators include return on equity, liquidity ratios, asset management ratios, profitability ratios, leverage ratios, and market value ratios. According to Carreta and Farina (2010), the performance evaluate can still be justified for use even if it is a composite of various indicators like accounting profits, productivity, and cash flow because it reflects what managers actually perceive as financial performance. Financial performance is influenced by a number of factors, including profit or value added, sales, fees, the budget, costs, and expenditures, equity indicators (like share price), and autonomy. Return on equity (ROE) and return on asset (ROA), two accounting performance metrics, also serve as financial performance indicators.

8.2.2 Determinants of Financial Performance in Manufacturing Firms

For all of the partners, but especially for financial backers, analysis of the factors affecting financial performance is essential. Investor value, also known as an organization's market value, depends on a few elements, including the organization's ongoing productivity, risks, and financial development, which is essential for future organization income. These are the main factors influencing how well manufacturing companies perform in the market. Branch (2000) argues the opposite, claiming that financial indicators in light of accounting data are sufficient to determine the incentive for investors. The FP of a manufacturing company is directly impacted by its position in the market. Net turnover and net revenue are the two main components of productivity that can be broken down. Both, according to Ross (2016), can have an immediate positive impact on an organization. Higher net revenue suggests that the component has significant market power because it is assumed that a high turnover rate indicates improved productivity and better use of the resources claimed by the organization. Two other important factors that have an impact on the financial performance of producing firms are risk and growth. The level of risk openness can alter the reasonable worth of an organization because market value is adjusted by its results. Since market value also takes into account anticipated future benefits, monetary development is yet another factor that aids in achieving a better situation in the financial business sectors. The size of the company can have a significant impact on financial performance because larger companies can take advantage of this benefit to gain some financial advantages in business relationships. Large organizations have easier access to the key factors in creation, including HR. Large associations also frequently receive less expensive subsidizing. According to the conventional wisdom, capital design has no bearing on how well an organization will perform. Recent analyses challenge this claim, arguing that capital design plays a significant role in determining corporate performance. According to Berwouts et al. (2008) theory, elements with higher benefit rates will continue to be underutilized because of their ability to generate their own funding. However, a significant amount of influence increases the risk of organizations going bankrupt. The organization's financial performance is thought to be impacted by all resources, with resources with greater significance and less risk taking. An enormous volume of deals (turnover) isn't really corresponded with further developed performance. Concentrates on that have inspected the connection among turnover and corporate performance were uncertain. After some time, the organization's primary goal has

advanced, and the need for immediate gain has been replaced by the need for the organization to continue developing over time (maintainable development). Therefore, performance would be strongly impacted by a supportable development rate greater than 1. The ability to generate profits is evidence of stability for the companies listed on the steadiness.

8.2.3 Accounting Measure to Evaluation Firm Performance

Researcher, who contribute in accounting research field such as Shen et al. (2010) and Richard et al. (2009 have generally recognized that the expression “firm performance” is a multi-faceted develop, including different perspectives that should be assessed. These perspectives incorporate the viability of a company's tasks, its corporate standing, its capacity to get by, and its accomplishment of monetary objectives. The monetary or financial part of a firm has acquired huge consideration and has been generally examined overall to satisfy the financial objectives of the firm. Researchers like Barney (2005) and Shen et al. (2010) have underlined the significance of FP in accomplishing these objectives. In deed, to assess the FP of a firm, specialists extensively utilize either AC put together pointers like ROA, ROE, and ROS, or securities exchange market based esteem (Shen et al. 2010), cost to profit (Stickney et al., 2007). Previously, AC-based research had been used much more frequently in corporate administration studies (Hoskisson et al., 1999), but recently, scientists have become more interested in performance-based research and are willing to take into account both of them in order to satisfy the FP of the company. According to Brush et al. (2005), market measures and AC pointers both address the company's financial performance, making them two of its glaring features.

Return on Assets (ROA): This ratio is a one kind of profits from ROI metric those actions the productivity of a business comparable to its all out resources. This proportion shows how well a firm is performing by contrasting the benefit before revenue and expense (net income) it's creating to the capital it's put resources into resources. Researcher use ROA to survey a company's working presentation comparative with ventures made disregarding whether the firm utilized obligation or equity capital to back the investment (Stickney, 1996). The higher the return, the more useful and effective administration is in using monetary assets. The ROA formula is:

$$\text{ROA} = \quad \text{Net profit before Interest and Tax}$$

Average Assets *100

Return on Equity (ROE): Return on equity refers to the profit a company generates for its investors using the funds the investors have made available to the company. In other words, it is the ratio of a company's annual return (overall gain) to the value of all of its investors, expressed as a rate. In other words, it calculates the returns received for each dollar of investment value. It reveals the success or failure of the administration in encouraging investors to return to the company given their interest in it (Alexander & Nobes, 2001). The formula for ROE is:

ROE = Net Income (anual)

Shareholders′ Equity * 100%

Return on Equity gives a basic indication to assess speculation returns. ROE may likewise give knowledge into how the organization the executives is utilizing funding from value to develop the business. By contrasting a company's ROE with the business' normal, something might be pinpointed about the association's upper hand. Without a doubt, an economically expanding in ROE over the long run can show that a firm is great at creating investor esteem, by knowing how to reinvest its income carefully, to build efficiency and benefits. Oppositely, a constant declining in ROE can decipher that administration went with unfortunate choices on reinvesting capital in useless undertakings.

Return on Sales (ROS): This ratio estimates the working overall revenue of the firm and how the administration is attempting to utilize the assets to produce the income and hence gives an understanding into the association's tasks to the lenders and imminent financial backers. ROS demonstrates how fruitful the administration is in making benefits from its deals, so it likewise called net overall revenue. It shows the effectiveness of the organization in creating a gain on the income produced. The formula is as follows:

ROS= Net income before interest and tax *100%

Net Sales

By and large, albeit a higher ROS shows great performance, it disregards “balance sheet and income statements”, rather than only taking a gander at the benefit and misfortune account. Accordingly, it gives a deficient perspective on performance (Warner & Hennell, 2001). The AC measure was considered as clear estimations that give a superior indicator of firm performance (Ra'ed Masa'deh at al., 2015). The ordinary accessibility of AC numbers in regards to association's productivity works with for financial backers to break down investment valuable open doors. In view of past and current benefit, financial backers can pursue business choices with the assumption for accomplishing a few benefits from now on. Nonetheless, a few scientists have agued a few constraints of these actions. Miller (1987), Ra'ed Masa'deh at al. (2015), and Hax (2003) expressed that AC numbers could be controlled by the executives and proprietors. Moreover, financial measures are viewed as wasteful to profoundly perceive the general achievement elements of a firm.

Table 8.3: Justification of Performance Measure

Return on Investment (ROI)	ROI = Net Income / Total asset *100%	Azleen et al., (2007); Moullac (2013); Kabajeh et al., (2012); Ankrah and Mensah (2015); Ahmed and Ahmed (2014)
Return on Equity (ROE	ROE = Net Income / Shareholder’s Equity *100%	Kabajeh et al. (2012); Ankrah and Mensah (2015); Marimuthu (2010); Mokhtar and Muda (2012); Zayed and Sinha (2019); Wahyu (2017)

The issue in surveying the signs of productivity might be the utilization of various benefit adjustments. Inclination in communicating profit can be portrayed as follows. Income After Taxes (EAT) is significant according to the viewpoint of the proprietor since it addresses a benefit to be circulated. Then again, Earnings before Taxes (EBT) is ideal as far as similarity of firms from nations with various tax collection or changes in charge rates over the long run while complementing the development in income and cost control, Earnings before Interest and Taxes

(EBIT) is normally applied. The ROE, ROA and ROS were chosen to address benefit proportions. The ROE is generally utilized by and by despite the fact that it is in some cases censured for not considering the issue of chance related with business exercises and the size of the underlying capital contributed or future pay (Baradwaj et al., 2009), so it is hard to accurately evaluate the impact on investor esteem. ROE esteem ought to be higher than the premium at which the firm can acquire outer capital. ROA is the proportion of EBIT to add up to resources put resources into the business. It permits us to contrast firms and various extents of obligation in monetary assets. Financial stability of a firm is related with its capacity to produce benefit, increment the worth of contributed capital and simultaneously reimburse its short-and long haul liabilities. Evaluation of FP is principally founded on different techniques for monetary investigation. The selection of strategies is fundamentally affected by the motivation behind use, time rules, character of data assets or the level of calculation advancement. The point is to accomplish the ideal degree of intricacy in assessing firm and its exercises.

8.3 Organizational Performance: Objective vs. Subjective

Literature has endeavored to analyze performance in various ways. Franco-Santos et al. (2012), arranged hierarchical performance into two particular gatherings, specifically revealed performance and perceived performance. The detailed performance contains FP like AC and strategic performance, as well as non-monetary performance revealed in distributed records like the yearly reports of associations. While saw execution may likewise incorporate monetary and non-monetary parts of hierarchical performance, for example, performance results and performance improvement, it is drawn from the impression of the exploration members instead of those being accounted for (Franco-Santos et al., 2012).

In the past researches, Burton, et al. (2003) recognized genuine execution from saw performance masures connecting with real perceived performance is frequently accessible for administrative use consistently. In the mean time, proportions of seen performance are frequently accumulated less regularly and languish delay to permit over information assortment, examination and dispersal of such data (Burton et al., 2003). However clients might gauge performance erroneously (Hornik, 1984), Burton, et al., (2003) found a huge and positive connection between real performance and perceived performance however not profoundly related.

Because of objectivity and simple openness, numerous scientists utilize information while certain specialists have alluded to the view of review respondents as an intermediary for performance all things being equal. For example, on account of divisional benefit evaluation, Chenhall (1997) involved apparent proportion of execution in an assembling setting in light of the hesitance of the main directors to allow the divulgence of genuine information connecting with development in resources and return on resources. Here, respondents were mentioned to assess the presentation of their divisions in light of their own judgment and in examination, to modern midpoints and similar elements throughout the course of recent years. In one more review directed by Ittner and Larcker (1997) to survey the perceived performance of key control frameworks, the analysts utilized apparent in general hierarchical execution close by FP to catch whatever other monetary or non-monetary objectives that might mean quite a bit to the association. Govindarajan and Fisher (1990) utilized performance estimates in their investigation of the impacts of procedure, control frameworks and asset sharing on the performance of key specialty units. Here analysts brought up the justification for why objective execution estimates offer restricted worth to the review. As a general rule, different specialty units were chasing after various procedures focusing on various objectives and needs where the utilization of a typical arrangement of performance measures wouldn't be significant. Once more, in some cases it was difficult to distinguish an objective performance measure that had the option to evaluate some basic achievement variables of specific methodologies. Now and again, objective information on FP for the business in which the specialty unit works were not accessible for correlation. As needs be, the review expected its respondents to rate the performance of their specialty units comparative with the corporate standards.

8.4 Management Accounting Practice (MAP) and Financial Performance (FP)

The economic models of decision-making state that in states of vulnerability, the arrangement of better-quality data would bring about superior asset allocation (Baines & Langfield-Smith, 2003) and powerful administrative choices, which would thusly improve the probability of positive authoritative PERF (Chenhall, 2003). As indicated by Gupta (1987), an association's essential data handling limit necessities to sufficiently address its issues as this would empower sound and convenient choices to arise, and eventually ideal PERF to be conveyed. The difficulties for the MAP and MAP is to give exceptional data to empower directors show up at informed monetary choices, and to help them in improving both client worth and investor esteem (Langfield-Smith et

al., 2006). Many examinations have delivered help for the view that more prominent MAP utilization is emphatically connected with PERF (Chenhall, 2005; De Geuser et al., 2009). All in all, it very well might be contended that headways in MAP might affect upon association PERF.

Oyerogbaet al. (2014) concentrated on the relationship that exists between cost administration rehearses and a company's performance in manufacturing associations involving information from 40 manufacturing organizations in Nigeria. The review depended on optional information removed from the examined fiscal report where direct material expense, direct work cost, creation above cost and managerial above cost were taken as free factors while benefit (Operating profit) was taken as a reliant variable addressing the company's performance. The review found a positive huge connection between cost MAP and a company's performance in manufacturing firms. Kumar (2013) examined the “Relationship between Inventory management & Profitability in Indian cement companies”, the review involved net benefit as an intermediary to gauge benefit and stock change period is utilized as a free factor while the size of the firm, monetary obligation proportion and current proportion are utilized as control factors. Information removed from an example of five top Indian cement firms for a time of a decade from 2001 - 2010 were utilized. The review utilized relapse examination to decide the effect of the stock change time frame over net working benefit where the review presumed that the stock transformation period has a backwards relationship with the firm’s productivity.

8.4.1 Costing and Financial Performance

Lyndon and Paymoster (2016) concentrated on the impact of stock expense the management on the benefit of recorded brewery companies in Nigeria. The review analyzed the impact of stock expense the management proxied by unrefined substance cost, work underway and Completed products cost against productivity proxied by net revenue utilizing optional information extricated from yearly reports for10 years time span covering from 2005 - 2014. Utilizing different relapse strategies, the investigation discovered that stock expense the management affects the benefit of distillery organizations in Nigeria. Anand et al. (2004) concentrated on the expense the management rehearses in India to catch the advancement in cost administration practice like representing overheads, utilizations of monetary control and standard costing in corporate India. The investigation discovered that in India, the organizations were effective in catching exact

expense and benefit data from their ABC cost frameworks through esteem chain and production chain analysis.

Some researcher centre around single costing frameworks like Elhamma and Zhang (2013) found action based costing brings about better performance for endeavours. Rehman (2010), while examining MA strategies in Pakistani assembling firms, found that the productive firms utilizing two MA methods; target costing and activity-based management fundamentally affected benefit at 6.4% and 8.2%, separately. Besides, Abdullah et al (2014) alluded that ABC has affected improvement of FP. Connecting with the objective costing (TC), Huang et al. (2012) observed that the FP of TC was decidedly connected with both plan of action developments and FP. It is likewise observed that higher accomplishment of TC is related with higher FP (Rattray et al., 2007; Juhmani, 2010). Imeokparia and Adebisi (2014) tracked down areas of strength for a connection between reception of TC and of progress consequently on speculation and decrease of cost.

With respect to credit costing, McNair et al. (2001) expressed that comprehension of the connection between the expenses of the firm and the worth the firm gives to its clients is the way in to the capacity of the firm to arrive at its benefit potential. They fostered the worth creation model which looks to comprehend the compromise between the thing the client will pay for an item/administration group (value) and the expense the firm bears to give what the client wants. Randall and Ulrich (2001) investigated item assortment at the item characteristic level, where they noticing that the general effect of assortment on creation and market intervention costs depends generally on the quality basic the assortment.

In setting of connection between life cycle costing (LCC) and firm performance, no immediate examinations were found with exemption of the review led by Tekavcic and Sink (2002) who observed that the normal monetary execution is subject to the utilization of LCC notwithstanding different procedures including ABC and target costing. Lindholm and Suomala (2005) pointed that LCC is more a perspective than just a costing device on the grounds that notwithstanding the management of costing, it centers around the drawn out performance of items by utilizing an assortment of the MA strategies. As for cost of value, Uyar (2008) alluded that the main three goals behind COQ estimating and announcing are: generally speaking quality improvement; setting cost decrease targets and estimating progress; and further developing control of value

exercises. (Sailaja et al (2013) introduced a utilization of action based cost administration of cost of value in an assembling industry and contrasted the outcomes and the customary P-A-F model. The outcomes feature the flimsy spots of customary expense of value model. From opposite side, Sower et al (2007) observed that Deals and benefit development were not essentially related with the presence of a quality expense framework or with the degree of development of the quality framework. Concerning value chain costing (VCC), firms performance is considered a contain for both the FP of the firm and intra-firm "supply chain performance" which is additionally separated into cost performance as planned operations costs, administration performance and resource usage, as recommended by the research (Solakivi, 2014). Randall and Ulrich (2001) found proof that firm performance is decidedly connected with accurately matching store network procedures to item assortment system. Solakivi (2014) found a more significant level of inventory network joint effort related with lower planned operations expenses and better FP. Adu-Gyamfi, Yusheng and Chipwere (2020) saw that as an MAP, the Costing framework was a measurably critical indicator of execution with (β =0.566; p = 0. 045) in the relapse examination. These discoveries show that the costing framework decidedly affects business performance, and that implies that a rate expansion in the degree to which the respondents apply to cost strategies will prompt a 0.566 expansion in performance of management as well as the other way around holding different factors consistent These outcomes are in accordance with the review led by Gichaaga (2014) which found a unit expansion in costing practice will cause a .556 expansion in financial performance.

8.4.2 Budgeting and Financial Performance

Budgeting can uphold the FP management by coordinating known monetary results with incessant re-forecasting of the financial plan and connected to the investigation of performance patterns (Melek, 2007). The rise of SM reasoning laid accentuation on detailed data as a reason for taking choices subsequently prompting the huge improvement of the MA and planning methods (Bartle, 2008). At the beginning phase of advancement, budgeting was worried about getting ready and introducing dependable data to legitimize responsibility and to allow right performance assessment and thus, rewards (Hindereth, 2002), In any case, throughout the long term, the capability and focal point of planning has moved extensively as business association turned out to be more mind boggling and their current circumstance become dynamic. Qi (2010) focused on the impact of the budgeting system on financial planning in SMEs in China and discovered that the formal budgeting

process had a positive impact on firm financial planning. According to the review, more formalized planning and budgeting arrangements result in higher sales revenue, and financial plan objective characteristics significantly affect the financial performance of Chinese SMEs. As a result, setting clear spending plan objectives leads to greater standard accomplishment, while setting challenging spending plan objectives increases the motivation of representatives to meet spending plan norms. At last, the review added that a more formalized monetary control will in general prompt higher development in the benefit of a firm. Budgets, according to Amalokwu and Obiajulum (2008), can help with the development and support of upper hands by enhancing the administrative capabilities that go along with it. Mohammed and Ali (2013) focused on the relationship between budgeting and the effectiveness of remittance in Somalia and discovered that the relationship between planning and firm financial performance is 0.514, which means that in Somalia, one level increase in planning or the viability of the budgeting process will result in a 0.514 increase in firm financial performance. This coefficient demonstrates a moderately strong, measurably positive relationship between planning and firm financial performance.

8.4.3 Performance Evaluation and Financial Performance

Chand and Dahiya (2010) completed an experimental review to figure out the utilization of contemporary MA methods in the Indian business through a study of 530 part organizations of the *"National Association of Financial Directors and Cost Controllers."* Around 63 organizations answered which comprised the example; with a reaction pace of around 12%. The focal point of the review was to find proof on how generally customary and contemporary MAP were taken on in the Indian business. The creator uncovered that improvement of generally productivity and cost decrease was the rousing elements for utilizing the MA in Indian organizations. The more the expense procured for a specific creation without a comparing expansion in the volume of creation, the more the benefits lessen. In this manner, manufacturing ventures ought to guarantee that when cost builds, volumes of creation ought to likewise increment for the organizations to take care of the rising fixed costs and furthermore hold a sensible benefit for the firm.

8.4.4 Decision Making and Financial Performance

Decision making has a direct impact on financial performance. Sound decisions, resource allocation, pricing tactics, and risk management can have a substantial impact on a company's profitability and long-term viability. Analyzing pertinent data, considering multiple alternatives, and evaluating prospective outcomes are all necessary for effective decision making. Strategic decisions based on financial analysis, such as expanding into new markets, streamlining processes, or refining product ranges, can generate growth and increase shareholder value. Thus, connecting decision-making processes with financial goals is critical for establishing and maintaining excellent financial performance in a changing corporate environment (Chenhall & Moers, 2007). The majority of examinations, according to Cadez and Guilding (2008), "offer some support for the view that more frequent MA use is emphatically connected with performance in many of these examinations, but the relationship is uncertain and setting subordinate." Regarding the combined findings of these investigations, Cadez and Guilding (2008) noted that there is a favorable correlation between decision making use and firm performance.

8.4.5 Strategic Analysis and Financial Performance

Strategic analysis is significant for determining an organization's financial performance. It entails assessing internal and external issues that may affect the company's capacity to meet its objectives. Companies can perform a detailed strategic analysis to identify their strengths, weaknesses, opportunities, and threats, which will serve as the foundation for formulating effective plans (Johnson & Kaplan, 1987). Financial performance, on the other hand, is a measure of how well a firm earns revenue and manages its resources in order to attain profitability and sustainability. It includes a variety of financial parameters like revenue growth, profitability ratios, liquidity, and solvency. The link between strategic analysis and financial success is the alignment of strategic objectives with financial goals. A well-defined strategy directs resource allocation, investment decisions, and operational actions, all of which have a direct impact on financial performance. For example, a corporation with an innovation strategy may invest extensively in R&D, potentially leading to new product introductions and revenue growth (Boselie & Paauwe, 2005). Furthermore, strategic analysis aids in recognizing market risks and opportunities, allowing businesses to adjust their financial strategy accordingly. Companies that regularly monitor and evaluate their strategic position can make educated decisions to improve their financial performance and maintain a competitive advantage in the marketplace. Strategic analysis and financial performance are

inextricably linked, with the former establishing the foundation for the latter's success. Understanding the relationship between these two factors allows businesses to establish strong plans that drive long-term growth and financial prosperity.

8.5 Limitations of Performance Measure

However, organizations should screen and assess various viewpoints of their performance; there is a need to have suitable arrangements of FP measures to give obvious signs to the degree of performance accomplished by the associations. Firms' performance measures have been customarily evolved by the MA to help administrators in arranging and controlling their associations. These actions typically consist of accrued, planned, and benefit-based financial measures. The procedures have been widely accepted in associations for a long time as a way to evaluate administrative and divisional performance. One such metric mentioned to evaluate the productivity of administrative work is the use of venture profit. Traditional performance measures created from costing and AC frameworks have been censured for empowering short terms (Bruggeman & Slagmulder, 1995), lacking vital concentration, empowering, empowering minimization of change instead of consistent improvement (Donnelly & Lynch, 2002), not being remotely engaged (Kaplan & Norton, 1992), and in any event, for annihilating the seriousness of the US producing industry (Hayes and Abernathy, 1980). At that point, numerous presentation estimation frameworks in the UK and the USA were vigorously monetarily one-sided, and it has been argued that frameworks that were explicitly intended for outer announcing were overall improperly used to oversee business endeavours (Hayes & Abernathy, 1980).

However, its reception has likewise been scrutinized for presenting a broken influence on navigation. For example, Johnson and Kaplan (1987) have featured the constraints of momentary financial measures and cautioned how they might be detached from the association's drawn-out objective. As per them, financial measures, for example, benefits and cost levels, don't provide food for changes in the business climate, which is driven by abbreviated item life cycles, fast mechanical changes, and contemporary ways to deal with creation activities and developments. Johnson and Kaplan (1987) likewise brought up the fact that assessing transient benefit as a mark of managerial performance is presently not a legitimate methodology in light of the fact that the customary bookkeeping approach of applying the matching idea to treat incomes and expenses is

blocked by the expanded capital force and diminished utilization of direct work in the transformation cycle, as well as more prominent commitment from the work of elusive assets and intellectual capital.

Johnson and Kaplan (1987) underscored that a suitable arrangement of non-financial measures should be embraced by FP, and these actions should be taken with cautious determination in light of the association's methodology. They further suggested that those associations that emphasize their technique on quality would have to gauge quality markers, for example, client grumblings, imperfection rates, scrap, adjust, and guarantee calls, since these non-financial measures are better associated with the association's long-term objectives. In such a manner, Bromwich and Bhimani (1989) further featured that in the new assembling climate that utilizes present-day approaches, for example, without a moment to spare and high-level manufacturing advances, performance estimates need to develop from the utilization of the customary proportions of work efficiency and standard expense differences to utilizing measures that show quality performance, conveyance time, and technology. Such development would put the presentation estimates in a superior position to help with direction and work with organizational strategy.

The improvement of non-financial performance measures has gotten extraordinary consideration all the more as of late, considering the need of associations to evaluate their presentation from something other than a solitary monetary standpoint. As per Chenhall and Langfield-Smith (2007), the non-accounting disciplines, for example, activities of the management, promoting the board, human assets of the executives, and corporate procedure, have contributed to the advancement of such measures, which give more prominent importance to their particular areas and obligations. Inside the tasks of the management discipline, the firm's executives centre around giving associations a better upper hand with the reception of practice, for example, complete quality administration, and target accomplishing working upgrades by means of more prominent interaction proficiency and compelling functional control. Subsequently, performance estimates created in this discipline are not just planned to help the executives figure out the reasons for costs and control these causes, but additionally to help the board recognize open doors for process upgrades and separate exercises that are value-adding from those that enhance the associations. In like manner, Chenhall and Langfield-Smith (2007) remind us that presentation estimates created in this discipline could be taken at different levels, going from a broad business level to a more

point-by-point movement level, with a typical concentration to measure competitive position like quality degree of products and services.

8.6 Empirical Results and Discussion

This section has been presented the output of inferential statistical methods are applied to achieve the objectives of this study. A data reduction method called principal component analysis (PCA), together with Cronbach's Alpha, KMO, and Hotelling's T-Squared test, is utilised to find any hidden relationships between the procedures. The structural equation model that is used to determine the relation and impact between the observe variables and latent variable.

8.6.1 Impact of Costing on Financial Performance

To measure the impact of costing on financial performance by using SEM, reliability test is required. Cronbach's Alpha (CA), a commonly employed statistical metric, is a fundamental tool in the field of quantitative research for evaluating the dependability of measurement scales. The Cronbach's alpha coefficient, created by Cronbach (1951), has established itself as a widely used measure for assessing the internal consistency of a collection of survey or test items. Reliability, in the context of quantitative research, pertains to the degree to which a measurement instrument regularly yields precise and trustworthy outcomes. Cronbach's Alpha measures the degree of internal consistency of a scale by evaluating the level of correlation among multiple items within the scale. The coefficient varies from 0 to 1, with higher values suggesting more internal consistency. A CA number approaching 1 indicates a strong level of internal consistency, suggesting that the items in the scale are closely linked and consistently measure the same underlying concept. In contrast, a low CA indicates that the items in the scale may not be accurately assessing the same concept. Cronbach's Alpha is an indispensable instrument in quantitative research that provides researchers with a dependable and direct approach to assess the internal consistency of measurement scales. However the reliability statistics has been presented by Cronbach's Alpha in Table 8.4. Cronbach's Alpha based on standardised items is 0.839, and the reliability test yields a value of 0.812, both of which are suitable to conduct SEM. The Hotelling's T-Squared test F statistics value is 40.839 which is significant at the 1% level, is displayed in Table 8.5.

Table 8.4: Reliability Statistics

Cronbach's Alpha (CA)	Cronbach's Alpha Based on Standardized Items	N of Items	Criteria	Decision
0.812	0.839	23	CA>0.70	Accepted

Table 8.5: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	P value	Criteria	Decision
1235.380	40.839	22	56	.000	P<0.05	Accepted

Table 8.6 put on view an acceptable KMO value of 0.723, indicating a sufficient sample size with an acceptable value.

Table 8.6: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.723	Criteria	Decision
Bartlett's Test of Sphericity	Approx. Chi-Square	1061.227	KMO>0.70	Accepted
	Df	253		
	Sig.	.000		

Table 8.7 shows the Principal Component Analysis where the extracted values of components or factors are greater than 0.40 (1>0.40>0) which is indicate no inconsistency in the selected factors.

Table 8.7: Principal Component Analysis

	Initial	Extraction	Criteria of Factor Value	Decision
FP_1	1	.963	1>0.40>0	Accepted
FP_2	1	.969	1>0.40>0	Accepted
FP_3	1	.938	1>0.40>0	Accepted
FP_4	1	.819	1>0.40>0	Accepted

ACS_1	1	.612	1>0.40>0	Accepted
ACS_2	1	.770	1>0.40>0	Accepted
ACS_3	1	.614	1>0.40>0	Accepted
ACS_4	1	.622	1>0.40>0	Accepted
ACS_5	1	.683	1>0.40>0	Accepted
ACS_6	1	.710	1>0.40>0	Accepted
ACS_7	1	.652	1>0.40>0	Accepted
ACS_8	1	.465	1>0.40>0	Accepted
ACS_18	1	.542	1>0.40>0	Accepted
ACS_19	1	.575	1>0.40>0	Accepted
ACS_20	1	.747	1>0.40>0	Accepted
ACS_21	1	.742	1>0.40>0	Accepted
ACS_22	1	.633	1>0.40>0	Accepted
ACS_23	1	.643	1>0.40>0	Accepted
ACS_24	1	.678	1>0.40>0	Accepted
ACS_25	1	.579	1>0.40>0	Accepted
ACS_26	1	.766	1>0.40>0	Accepted
ACS_27	1	.777	1>0.40>0	Accepted
ACS_28	1	.620	1>0.40>0	Accepted

Moreover, the empirical validation of this model has been presented in Table 8.9, where the Chi-square is 498.709 and it is significant at 1% level. The level of discrepancy CMIN/DF is 2.168 which is acceptable. The goodness of fit (Table 8.8) criteria shows the values of GFI is 0.708 and AGF is 0.649 with a RMSEA value is significant at 10% level. The ECVI value has been maintained the upper and lower bound of the particular values. The model fit evidence has no inconsistency to present the SEM analysis.

Table 8.8: R Square and Adjusted R Square

	Value	Criteria	Decision
GFI/R Square	.708	GFI>0.60	Acceptable
AGFI/Adj. R Square	.649	AGFI>0.60	Acceptable

Table 8.9: Model Fit Evidence

Criteria	Statistics/ Value	Condition	Decision
Chi-square	Value =498.709 Prob= 0.00	P<0.05	Acceptable
CMIN/DF	2.168	CMIN/DF<4.0	Acceptable
RMSEA	0. 103	RMSEA<0.10	Acceptable
ECVI	7.672 (LO 90_6.884- HI 90_8.559	HI>ECVI>LO	Acceptable

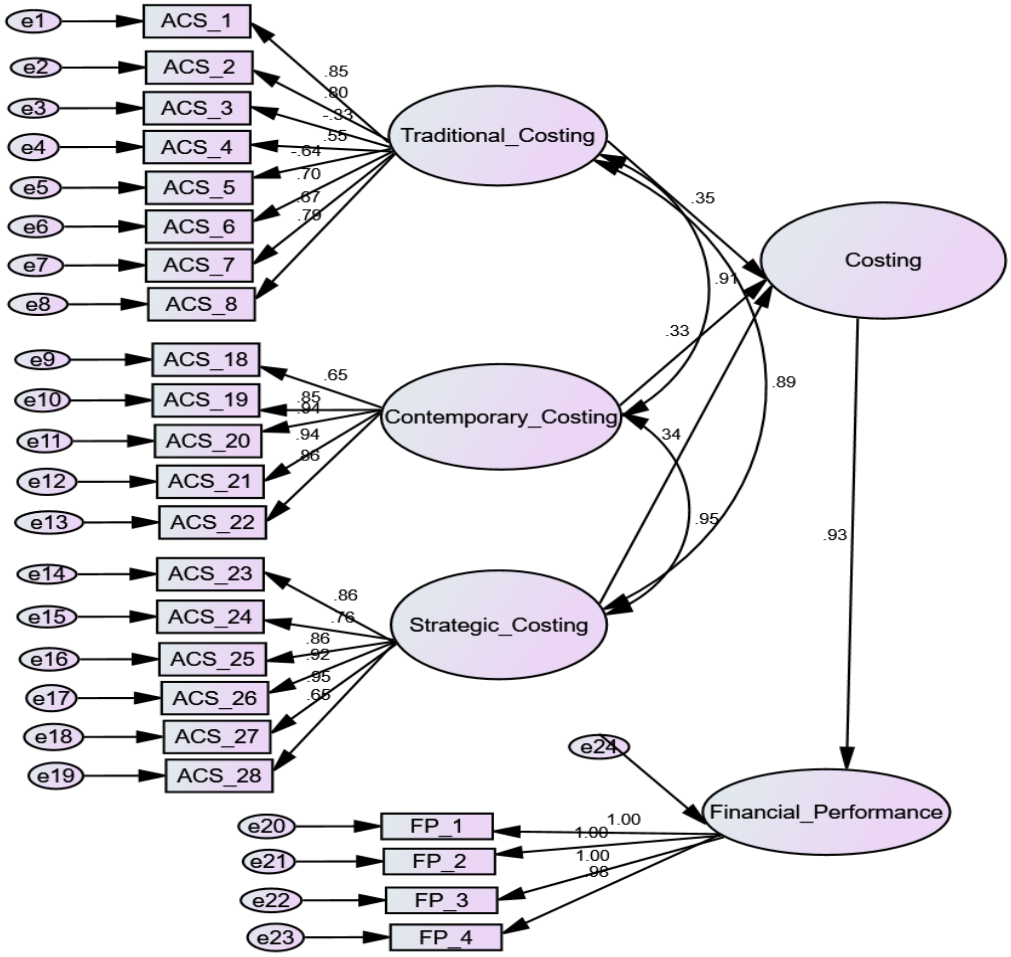


Figure 8.1: Costing Impact on Financial Performance

Figure 8.1 presented the impact of costing based on traditional, contemporary and strategic method on financial performance, the coefficient of traditional costing is 0.35, coefficient of contemporary costing is 0.33 and coefficient of strategic costing is 0.34. However, costing method is practice the traditional method more than other methods such as contemporary and strategic costing. Overall costing system has positive and significant impact on financial performance. The coefficient of costing system is 0.93 to explain financial performance. 1 percent increase of practice of effecting costing tends to raise financial performance 0.93%. There is positive relation exists between those variables.

The influence of costing procedures on financial performance extends beyond internal decision-making and encompasses financial reporting and adherence to accounting rules. The selection of a costing system can have an impact on the classification, recording, and reporting of expenses in financial statements, which in turn affects key metrics such as net income, gross margin, and return on investment. Ultimately, the choice of a costing method in accounting significantly influences financial performance (Pires et al., 2023; Nik Abdullah, et al., 2022). Organizations should thoroughly evaluate their industry, production processes, and strategic objectives in order to select a costing approach that is in line with their aims. The selected costing system should not only ensure precise cost information but also enhance decision-making, resource allocation, and the overall financial well-being and prosperity of the firm.

8.6.2 Impact of Budgeting on Financial Performance

Budgeting is a fundamental aspect of management accounting that plays a crucial role in enabling efficient planning, control, and decision-making in businesses. Budgeting is not just about financial planning; it is an instrument that helps align corporate goals, allocate resources wisely, and contribute to the overall performance of an institution (Baya, 2023). One of the primary advantages of budgeting is its function in assessing and managing performance. Moreover, budgeting functions as a fundamental basis for making strategic decisions. It assists management in assessing the financial viability of suggested projects, expansion strategies, or strategic objectives (Liza, 2023).

Moreover, the reliability statistics has been presented by Cronbach's Alpha and Hotelling's T-Squared test in Table 8.10 and Table 8.11 respectively. Cronbach's Alpha, the reliability test, shows the value 0.857 and based on standardised items is 0.864, both of which are suitable to conduct SEM.

Table 8.10: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Criteria	Decision
.857	.864	14	CA>0.70	Accepted

The Hotelling's T-Squared test F statistics value is 30.979 which is significant at the 1% level, is displayed in Table 8.11.

Table 8.11: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	P value	Criteria	Decision
477.077	30.979	13	65	.000	P<0.05	Accepted

Table 8.12 put on view an acceptable KMO value of 0.809, indicating a sufficient sample size with an acceptable value. The condition of accepting KMO value is KMO>0.60. Estimated value of KMO is 0.809 that is accepted.

Table 8.12: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.809	Criteria	Decision
Bartlett's Test of Sphericity	Approx. Chi-Square	830.758	KMO>0.70	Accepted
	Df	91		
	Sig.	.000		

Table 8.13 shows the Principal Component Analysis where the extracted values of components or factors are greater than 0.40 (1>0.40>0) which is indicate no inconsistency in the selected factors.

Table 8.13: Principal Component Analysis

	Initial	Extraction	Criteria	Decision
ABP_1	1	.595	1>0.40>0	Accepted
ABP_2	1	.681	1>0.40>0	Accepted
ABP_3	1	.666	1>0.40>0	Accepted
ABP_4	1	.471	1>0.40>0	Accepted
ABP_5	1	.760	1>0.40>0	Accepted
ABP_6	1	.423	1>0.40>0	Accepted
ABP_7	1	.584	1>0.40>0	Accepted

ABP_8	1	.478	1>0.40>0	Accepted
ABP_9	1	.461	1>0.40>0	Accepted
ABP_10	1	.591	1>0.40>0	Accepted
FP_1	1	.955	1>0.40>0	Accepted
FP_2	1	.968	1>0.40>0	Accepted
FP_3	1	.928	1>0.40>0	Accepted
FP_4	1	.785	1>0.40>0	Accepted

However the model fit evidence has been presented in Tale 8.14 and 8.15. The value of Chi-square is significant at 1% level. Value of CMIN/DF, the level of discrepancy is 1.718, GFI and AGFI values are 0.815 and 0.745 both are acceptable and the value of ECVI also acceptable with its consistent value.

Table 8.14: R Square and Adjusted R Square

	Value	Condition	Decision
GFI/R Square	.815	GFI>0.60	Accepted
AGFI/Adj. R Square	.745	AGFI>0.60	Accepted

Table 8.15: Model Fit Evidence

Criteria	Statistics/ Value	Condition	Decision
Chi-square	Value =130.552 Prob= 0.00	P<0.05	Accepted
CMIN/DF	1.718	CMIN/DF<4.0	Accepted
RMSEA	0.097	RMSEA<0.10	Exceed acceptance level
ECVI	2.449 (LO 90_2.088- HI 90_2.912	HI>ECVI>LO	Accepted

However, Figure 8.2 state that, the coefficient of traditional budgeting is 0.47 and contemporary budgeting is 0.55. The value of the coefficient traditional budgeting is greater than contemporary

budgeting system. To measure the impact of budgeting on financial performance, empirical findings state that, one percent raises the practice of budgeting increase financial performance 0.36%. The relation between the variables is positive and significant.

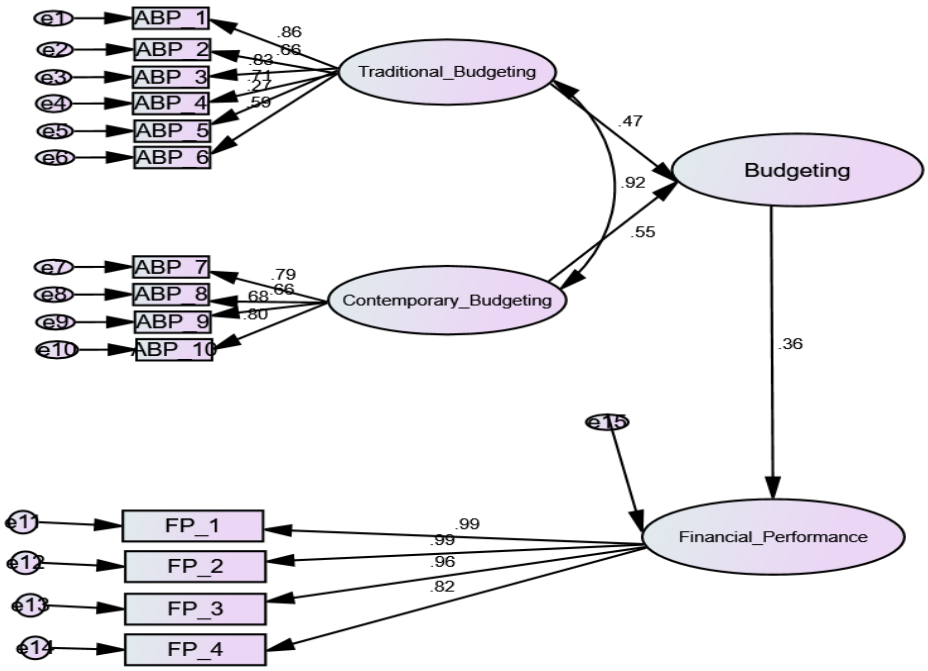


Figure 8.2: Budgeting Impact on Financial Performance

Budgeting techniques have a significant influence on the financial success in the field of accounting. Conventional budgeting offers steadiness but may lack the flexibility required in today's dynamic corporate landscape. Modern budgeting techniques, which prioritize strategic alignment and adaptability, can improve financial performance by optimizing resource allocation and ensuring that budgets accurately reflect the organization's current priorities and circumstances.

The selection between conventional and modern methodologies should be determined according to the particular requirements, objectives, and dynamics of the company. However, the budgeting procedures have undergone changes over time, resulting in the emergence of classic and contemporary approaches. Each strategy has unique implications for financial performance in the field of accounting. The influence of both conventional and current budgeting procedures is significant, since they shape the planning, resource allocation, and financial evaluation of organizations, eventually determining their financial well-being and achievement (Alayli, 2023; Abdi & Mutswenje, 2023).

8.6.3 Impact of Performance Evaluation on Financial Performance

Reliability testing, shown by the use of Cronbach's Alpha, is crucial for enhancing the dependability of study findings. It helps to enhance precision and consistency in the interpretation of study findings. Table 8.16 presented the Cronbach's Alpha coefficient for the standardized items is 0.856, and the reliability test shows a value of 0.819, both of which indicate reliability which is acceptable.

Table 8.16: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Condition	Decision
.819	.856	13	CA>0.70	Accepted

In addition, Hotelling's T-Squared Test enhances study reliability by providing a strong instrument for identifying abnormalities or outliers in multivariate data. Researchers can find and handle these important data points with the use of this test, as outliers can have a major impact on the reliability of statistical analysis. The Hotelling's T-Squared test F statistics is 36.800, which is significant at the 1% level, is displayed in Table 8.17. Table 8.18 displays an acceptable KMO value of 0.758, indicating a sufficient sample size.

Table 8.17: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	P value	Condition	Decision
515.196	36.800	12	66	.000	P<0.05	Accepted

Table 8.18: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.785	Condition	Decision
Bartlett's Test of Sphericity	Approx. Chi-Square	889.311	KMO>0.70	Accepted
	Df	78		
	Sig.	.000		

Table 8.19 shows the Principal Component Analysis where the extracted values of components or factor are greater than 0.40 which is indicate no inconsistency in the selected variables.

Table 8.19: Principal Component Analysis

	Initial	Extraction	Criteria of Factor Value	Decision
APES_1	1	.597	1>0.40>0	Accepted
APES_2	1	.782	1>0.40>0	Accepted
APES_3	1	.795	1>0.40>0	Accepted
APES_4	1	.656	1>0.40>0	Accepted
APES_5	1	.480	1>0.40>0	Accepted
APES_6	1	.718	1>0.40>0	Accepted
APES_7	1	.523	1>0.40>0	Accepted
APES_8	1	.606	1>0.40>0	Accepted
APES_9	1	.643	1>0.40>0	Accepted
FP_1	1	.966	1>0.40>0	Accepted
FP_2	1	.975	1>0.40>0	Accepted
FP_3	1	.942	1>0.40>0	Accepted
FP_4	1	.788	1>0.40>0	Accepted

Moreover, the empirical validation of this model has been presented in Table 8.19 and 8.20, where the Chi-square is 179.637 and it is significant at 1% level. The level of discrepancy CMIN/DF is 2.807 which is acceptable. The goodness of fit criteria shows the values 0.751 and AGF is 0.646. The ECVI indicates the level of interval with considering the upper and lower limit. The model fit evidence has no inconsistency to present the SEM analysis.

Table 8.20: R Square and Adjusted R Square

	Value	Condition	Decision
GFI/R Square	.751	GFI>0.60	Acceptable
AGFI/Adj. R Square	.646	AGFI>0.60	Acceptable

Table 8.21: Model Fit Evidence

Criteria	Statistics/ Value	Condition	Decision
Chi-square	Value =179.637 Prob= 0.00	P<0.05	Accepted
CMIN/DF	2.807	CMIN/DF<4.0	Accepted
RMSEA	.104	RMSEA<0.10	Accepted
ECVI	3.034 (LO 90_2.564- HI 90_3.604	HI>ECVI>LO	Accepted

Figure 8.3 presented the impact of performance evaluation based on traditional and contemporary methods on financial performance, the coefficient of traditional measure of performance measure is 0.44 and the coefficient of contemporary performance measure is 0.56. The coefficient of contemporary performance measure is greater than practice of traditional performance measure. However, performance evaluation system has positive and significant impact on financial performance. The coefficient of performance evaluation is 0.44 to explain financial performance. 1 percent increase of performance evaluation tends to raise financial performance 0.44%. There is a positive relation exit between those variables. More performance evaluation indicates more financial performance of an organization.

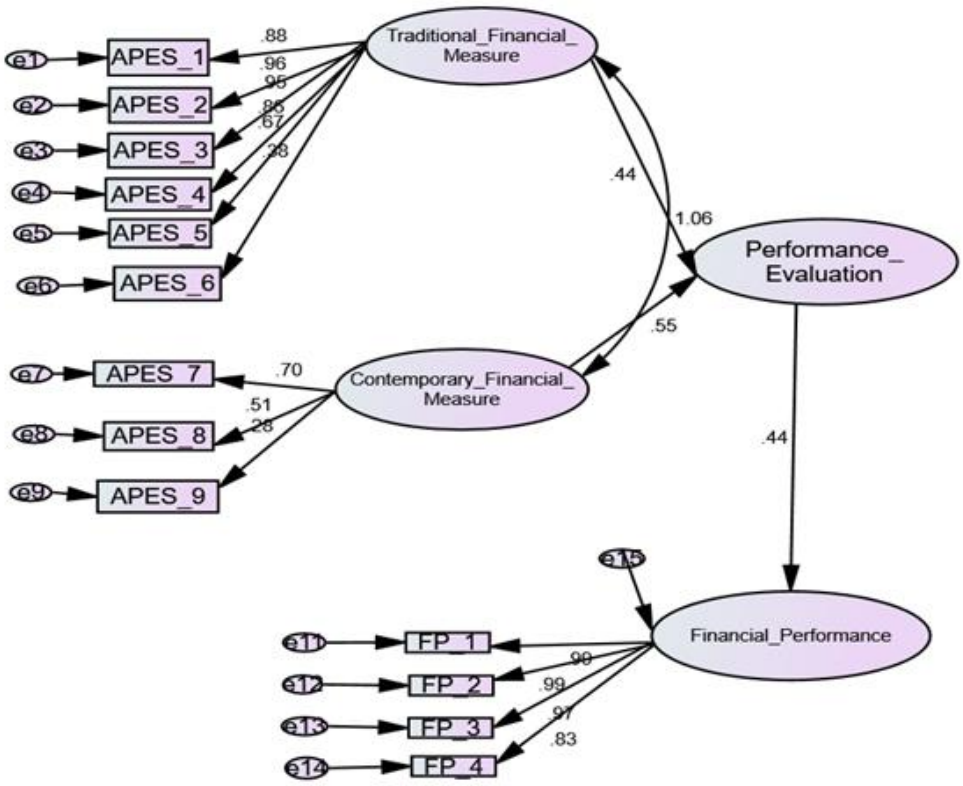


Figure 8.3: Performance Evaluation Impact of Financial Performance

Performance evaluation is a crucial element in evaluating how well a company operates and how it affects its financial performance. The evaluation process entails a methodical assessment of several elements, encompassing operational procedures and strategic alignment, with the conclusions having a direct impact on an organization's financial well-being and performance. Financial performance measures are significantly influenced by performance evaluation, making it one of the main variables to consider. The efficacy of an organization's operations and strategic endeavors is frequently apparent in its financial statements. Performance assessments involve the evaluation of key indicators such as profitability ratios, return on investment, and revenue growth. A positive performance evaluation indicates that the firm is successfully attaining its financial goals, producing profits, and effectively employing its resources. Moreover, performance evaluation offers valuable insights into the control of costs and operational efficiency. Organizational performance evaluation is a process that includes evaluating several facets of

financial stability, operational effectiveness, and strategic alignment. Based on traditional accounting methods, traditional financial measurements emphasize quantitative indicators and historical financial data (Pourghaffar et al., 2023). Businesses' performance evaluations are greatly impacted by their decision between traditional and contemporary financial evaluations (Parvizi & Jamshidinavid, 2023).

8.6.4 Decision Making Impact on Financial Performance

Reliability testing for the model decision making impact on financial performance has been presented in Table 8.21. It helps to enhance the accuracy and consistency in the interpretation of study findings. The Cronbach's Alpha coefficient for the standardized items is 0.862, and the reliability test (Cronbach's Alpha) produces a result of 0.859, both of which indicate reliability of the data set. The Hotelling's T-Squared test, which is significant at the 1% level, is displayed in Table 8.22.

Table 8.22: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Condition	Decision
.859	.862	13	CA>0.70	Accepted

Table 8.23: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	P value	Condition	Decision
105.801	7.557	12	66	.000	P<0.05	Accepted

Table 8.23 displays an acceptable KMO value of .814, indicating a sufficient sample size. The condition of KMO value should be KMO>0.60. Sufficient value of KMO value indicates the precondition of estimate SEM.

Table 8.24: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.814	Condition	Decision
Bartlett's Test of Sphericity	Approx. Chi-Square	836.174	KMO>0.70	Accepted
	Df	78		
	Sig.	.000		

Table 8.24 shows the Principal Component Analysis (PCA) where the extracted values of components are greater than 0.40 which is indicate no inconsistency in the selected factors towards estimating the SEM.

Table 8.25: Principal Component Analysis

	Initial	Extraction	Criteria of Factor Value	Decision
ADM_1	1	.718	1>0.40>0	Accepted
ADM_2	1	.596	1>0.40>0	Accepted
ADM_3	1	.675	1>0.40>0	Accepted
ADM_4	1	.400	1>0.40>0	Accepted
ADM_5	1	.609	1>0.40>0	Accepted
ADM_6	1	.676	1>0.40>0	Accepted
ADM_7	1	.588	1>0.40>0	Accepted
ADM_8	1	.712	1>0.40>0	Accepted
ADM_9	1	.597	1>0.40>0	Accepted
FP_1	1	.960	1>0.40>0	Accepted
FP_2	1	.967	1>0.40>0	Accepted
FP_3	1	.936	1>0.40>0	Accepted
FP_4	1	.790	1>0.40>0	Accepted

However the model fit evidence has been presented in Table 8.25 and 8.26. The value of Chi-square is 227.257 and it is significant at 1% level. Value of CMIN/DF, the level of discrepancy is 3.496. GFI and AGFI values are 0.746 and 0.645 both are acceptable and the value of RMSEA and ECVI also acceptable with its consistent value.

Table 8.26: R Square and Adjusted R Square

	Value	Condition	Decision
GFI/R Square	.746	GFI>0.60	Acceptable
AGFI/Adj. R Square	.645	AGFI>0.60	Acceptable

Table 8.27: Model Fit Evidence

Criteria	Statistics/ Value	Condition	Decision
Chi-square	Value =227.257 Prob= 0.00	P<0.05	Accepted
CMIN/DF	3.496	CMIN/DF<4.0	Accepted
RMSEA	.108	RMSEA<0.10	exceed acceptance level
ECVI	3.627 (LO 90_3.079- HI 90_4.273	HI>ECVI>LO	Accepted

From the Figure 8.4, the coefficient of traditional long term decision making is 0.61 to explain decision making process and the traditional short term decision making is 0.41.The coefficient value of long term is greater than short term decision making, so the long term decision making strategy is more effective than long term decision making process. The decision making has positive impact on performance evaluation, one percent increase of effective decision making has been able to raise financial performance 0.89 percent. Effective decision making process can enrich the firm's financial performance.

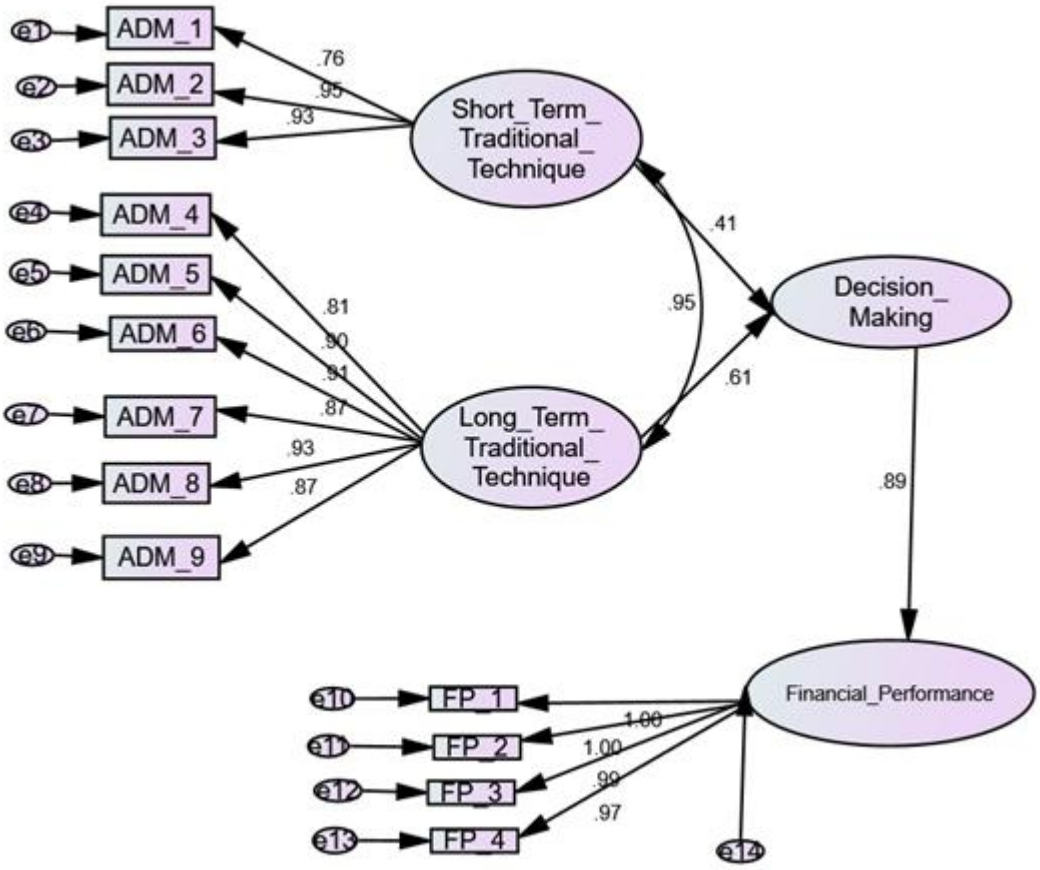


Figure 8.4: Decision making impact on financial Performance

Decision-making has an influence on financial performance, playing a crucial role in the success of a business. Decisions that are based on accurate information, in line with long-term goals, and make optimal use of resources, while effectively managing risks, is key to maintaining financial stability and resilience. In the ever-changing landscape of business, the skill to make well-informed choices becomes crucial for attaining and sustaining optimal financial success. The correlation between decision-making and financial performance is a crucial element in achieving organizational success. According to the results, there is a relation between decision making and financial performance. Decisions on entering the market, expanding product range, merging with or acquiring other companies, and overall business strategy can have long-term impacts on generating revenue, achieving profitability, and enhancing shareholder value (Pourghaffar et al., 2023).

8.6.5 Impact of Strategic Analysis on Financial Performance

Table 8.27 shows the reliability statistics (Cronbach's Alpha) and Table 8.28 presents the KMO and Bartlett's test for sampling adequacy. A high Cronbach's Alpha value signifies robust internal consistency, instilling assurance in the dependability of the data. A high Kaiser-Meyer-Olkin (KMO) score indicates a strong correlation and shared variability among the variables, indicating their appropriateness for factor analysis.

Table 8.28: Reliability Statistics

Cronbach's Alpha	N of Items	Condition	Decision
.802	17	CA>0.70	Accepted

However, the reliability statistics has been presented by Cronbach's Alpha in Table 8.27. Value of Cronbach's Alpha is 0.802 which is suitable to conduct SEM. Table 8.28 put on view an acceptable KMO value of 0.800, indicating a sufficient sample size to conduct SEM.

Table 8.29: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.800	Condition	Decision
Bartlett's Test of Sphericity	Approx. Chi-Square	1038.006	KMO>0.70	Accepted
	Df	136		
	Sig.	.000		

Table 8.29 shows the Principal Component Analysis where the extracted values of components are greater than 0.40 which is indicate no inconsistency in the selected factors.

Table 8.30: Principal Component Analysis

	Initial	Extraction	Criteria of Factor Value	Decision
ASA_1	1	.670	1>0.40>0	Accepted
ASA_2	1	.619	1>0.40>0	Accepted

ASA_3	1	.647	1>0.40>0	Accepted
ASA_4	1	.684	1>0.40>0	Accepted
ASA_5	1	.699	1>0.40>0	Accepted
ASA_6	1	.708	1>0.40>0	Accepted
ASA_7	1	.481	1>0.40>0	Accepted
ASA_8	1	.774	1>0.40>0	Accepted
ASA_9	1	.553	1>0.40>0	Accepted
ASA_10	1	.616	1>0.40>0	Accepted
ASA_11	1	.558	1>0.40>0	Accepted
ASA_12	1	.750	1>0.40>0	Accepted
ASA_13	1	.663	1>0.40>0	Accepted
FP_1	1	.960	1>0.40>0	Accepted
FP_2	1	.968	1>0.40>0	Accepted
FP_3	1	.938	1>0.40>0	Accepted
FP_4	1	.791	1>0.40>0	Accepted

Moreover, the empirical validation of this model has been presented in Table 8.30 and Table 31, where the Chi-square is 169.257and it is significant at 1% level. The level of discrepancy CMIN/DF is 1.745 which is acceptable. The goodness of fit criteria shows the values 0.796 and AGF is 0.714 with a RMSEA has an acceptable value. The model fit evidence has no inconsistency in the SEM analysis.

Table 8.31: R Square and Adjusted R Square

	Value	Condition	Decision
GFI/R Square	.796	GFI>0.60	Acceptable
AGFI/Adj. R Square	.714	AGFI>0.60	Acceptable

Table 8.32: Model Fit Evidence

Criteria	Statistics/ Value	Condition	Decision
Chi-square	Value =169.257 Prob= 0.00	P<0.05	Accepted
CMIN/DF	1.745	CMIN/DF<4.0	Accepted
RMSEA	.098	RMSEA<0.10	Accepted
ECVI	3.211 (LO 90_2.792- HI 90_3.732	HI>ECVI>LO	Accepted

Figure 8.5 state the impact of strategic analysis on financial performance where the strategic analysis have some factors such as strategic planning, customer accounting, strategic decision and competitor accounting where the customer accounting has the highest coefficient value 7.03 to determine strategic analysis, second largest coefficient value 3.03 is for strategic decision and lowest value for competitor accounting is 2.42 towards represent strategic analysis. However, strategic analysis has a coefficient value 0.30 which is positive to explain financial performance. There is a positive relationship between the strategic analysis and financial performance.

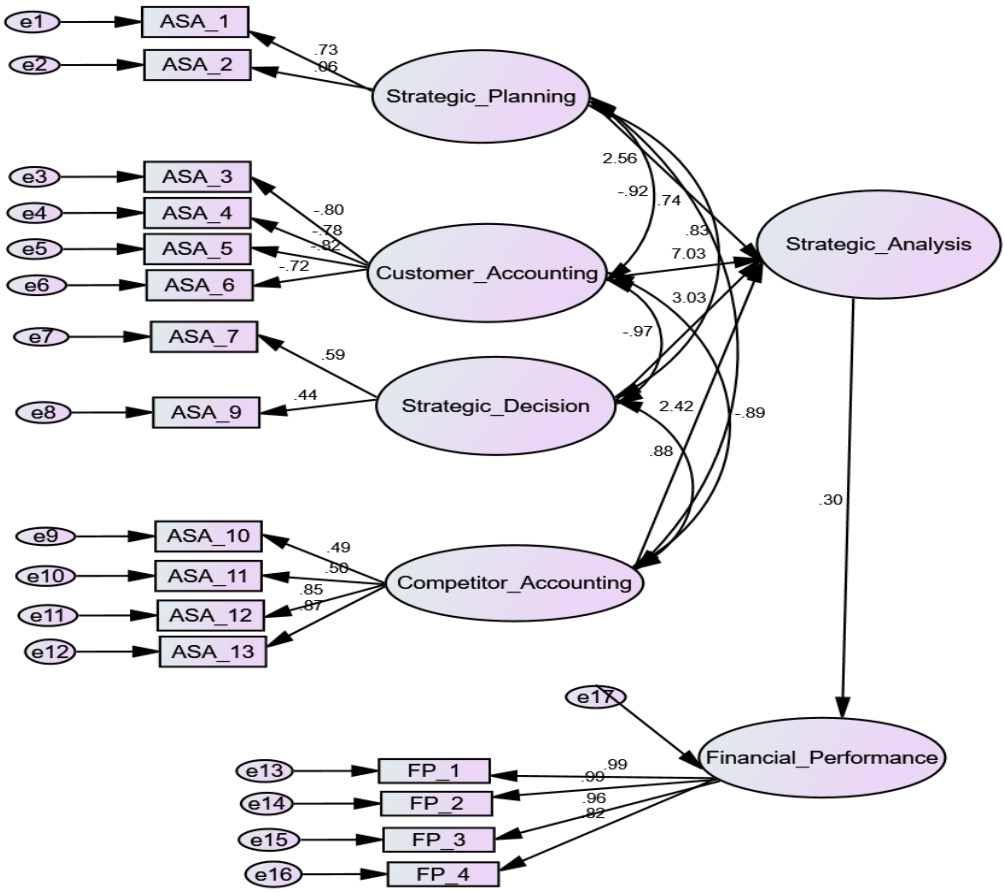


Figure 8.5: Impact of Strategic Analysis on Financial Performance

Moreover, strategic analysis is an essential element in the field of management accounting, serving as a critical factor in directing firms towards well-informed decision-making, allocation of resources, and overall financial prosperity. This analytical procedure entails evaluating both internal and external elements that influence an organization's capacity to accomplish its goals. Strategic analysis plays a crucial role in management accounting practice since it has multiple dimensions and is essential for organizational effectiveness. The main importance lies in the synchronization of financial goals with broader strategic objectives. By conducting strategic analysis, management accountants acquire valuable understanding of the organization's strengths, weaknesses, opportunities, and dangers. By incorporating strategic analysis into MAP, firms can

improve their financial performance, reduce risks, and position themselves for long-term success in a dynamic and competitive business environment.

8.7 Hypothesis Testing

However, the results have decided to make decision on developed hypothesis. There are five hypothesizes based on hypothesis 2, for this section based on MAP impact on financial performance. Table 8.32 presents the results of hypothesis testing and decision.

Table 8.33: Decision on Hypothesis

Hypothesis	**Coefficient Sign**	**Decision**
H2a= There is a significant and positive impact of costing on financial performance.	0.93	Coefficient sign Accepted (Significant)
H2b= There is a significant and positive impact of budgeting on financial performance.	0.85	Coefficient sign Accepted (Significant)
H2c= There is a significant and positive impact of performance evaluation on financial performance.	0.44	Coefficient sign Accepted (Significant)
H2d= There is a significant and positive impact of decision making on financial performance.	0.89	Coefficient sign Accepted (Significant)
H2e= There is a significant and positive impact of strategic analysis on financial performance.	0.30	Coefficient sign Accepted (Significant)

Nonetheless these findings have been accepted the developed hypothesis H2a, H2b, H2c, H2d, and H2e and the results are statistically significant.

8.8 Objective Measures and Objective Measures of Financial Performance

In this section, the literature on objective and subjective measures of performance is integrated.

8.8.1 Objective Measures

In certain areas of business and the board, for example, strategy, the point of convergence of consideration has been totally coordinated towards monetary proportions of performance (Rowe et al., 2008). There are a few bits of knowledge that can be closed from our survey of studies that zeroed in on genuine proportions of performance. In the first place, it very well may be noted from the current writing that concentrates on which zeroed in on genuine proportions of FP is not practically identical with the number and power of the examinations that utilized emotional proportions of performance. Once more, this is on the grounds that occasionally reliable and tantamount information on genuine measures are hard to acquire in light of multiple factors, as made sense of before in the paper. Second, there is no consistency as far as the objective performance estimates picked by analysts in various examinations which makes it more risky with regards to articulating the hypothesis of objective performance (see Boselie & Paauwe, 2005). There are unexpected issues of working with genuine measures, for example a few goal database concentrates on utilize a cross-sectional plan, the dependability and legitimacy of which is different in various plans - post-prescient, review, contemporaneous or prescient - with each plan having its own limits (see Wright et al., 2005). Up to this point there is no agreement among specialists with regards to which configuration is generally substantial and dependable. Given the previously mentioned issues with the utilization of true information, we contend that subjective measures could be a solid and substantial option in contrast to objective performance.

8.8.2 Subjective Measures

Whether one utilizes unbiased or subjective measures (SM) of performance involves specialist decision. The goal proportions of performance, nonetheless, do enjoy the benefit that they can

decrease the likelihood of normal technique difference (Wall & Wood, 2005) and could abstain from deceiving regulating and unmistakable hypothesis building (Dess & Lumpkin, 2005). In any case, notwithstanding this benefit for real measures, frequently predictable and similar information on the goal proportions of performance are challenging to acquire for the total example of firms being scrutinized. This can happen when, for example, the organization isn't recorded on the stock trade, or on the other hand on the off chance that it is a privately owned business not obliged to reveal its monetary data. Furthermore, in cross-country studies, monetary information may not be accessible on all organizations under study; when accessible, they may not be completely tantamount assuming that the organizations are adhering to various revealing and bookkeeping guidelines (Hult et al., 2008). Because of these likely troubles, specialists have effectively utilized abstract proportions of execution in their work. Bradley et al. (2012) executed a perceptual proportion of firm execution as far as benefit comparative with the earlier year in their new concentrate on capital and performance in creating economies since genuine monetary information were not accessible. A marginally unique methodology was taken on in crafted by Kyrgidou & Spyropoulou (2013), who asked Presidents and overseeing chiefs to evaluate their business performance comparative with their principal rivals. All the more explicitly, they gathered perceptual evaluations of deals, client and FP. Kunz (2015) likewise evaluated organization performance utilizing top administrators' view of monetary circumstances, organization development, representative efficiency, and worker vacillation and maintenance contrasted with their immediate industry rivals. The creators recognized that an objective mark of performance would have been utilized; in any case, exclusive organizations partaking in the review didn't distribute their financial performance results.

8.8.3 The Use of both Objective and Subjective Measures

A few researchers utilized both “objective and subjective performance” measure in their study, albeit this was considerably less normal (Hult et al., 2008). They likewise lay out that there are a couple of inclinations associated with self-revealed firm performance information (see Bjorkman & Budhwar, 2007; Wall et al., 2004) by demonstrating that the two measures are similarly substantial and dependable. The reasoning behind this is by all accounts that subjective proportions of OP empower administrators to figure the organizations' targets while assessing their presentation. As such, a few creators propose that the outcomes assembled through emotional and

objective measures will more often than not be comprehensively similar (Tzafrir, 2005). For instance, Dess and Robinson (1984) place that self-announced presentation measures are adequate and are solid as goal measures, connecting the emotional proportions of execution with self-detailed objective measures (gathered through studies rather than the real fiscal summaries of the organizations). In perhaps of the earliest review, Powell (1992) recognized various positive associations between the "objective and subjective performance" of OP. Along these lines, Venkatraman and Ramanujam (1987) showed that chiefs will generally be less one-sided in their Over powered assessment than specialists have recently accepted; they contend that authoritatively revealed performance information can be utilized as satisfactory rules for performance estimation, and that different proportions of objective and subjective standards are really to be liked.

Also, subjective measures of performance were viewed as emphatically related with the goal proportions of OP (see Dollinger & Brilliant, 1992). McCracken et al. (2001) looked at the abstract impression of emergency clinic chiefs with the objective FP proportions of 60 emergency clinics. While the relationships between's the two measures change, ROA and working edge were perceived as the most legitimate abstract monetary proportions of emergency clinic execution. Moreover, McClure (2010) researched both goal and emotional proportions of execution inside a solitary example and recognized that the normal technique predisposition was absent in the examined information. Likewise, Homburg, Artz and Wieseke (2012) approved their subjective proportion of return on deals on a sub-test of organizations for which the goal return on deals marker was additionally accessible, noticing areas of strength for a, connection between's the two measures. Harris (2001) has likewise detailed a critical connection between's the subjective and objective proportion of firm performance estimated concerning profit from speculation and deals development. There are various different examinations that have detailed critical relationships among's subject and objective proportions of OP (for example Flanagan & O'Shaughnessy, 2005; Coombs & Gilley, 2005). Albeit objective measures have been generally approved in past exploration, there are likewise a few examinations that recommend subjective measures may be hazardous. Meier and O'Toole (2013), for instance, have contended that authoritatively announced performance information can be inclined to normal source inclination. Taken together, there is a lot of exploration that has utilized subjective measures for evaluating OP and its determinants. In their complete survey, Richard et al. (2009) revealed that 26% of the examinations on OP

distributed in five top-level businesses and the board journals1 somewhere in the range of 2005 and 2007 applied an emotional proportion of performance of some kind. Most often, subjective measures in these examinations contained objective impression of disrepute (for example Arya and Lin, 2007), corporate social obligation (for example Luo, 2006).

8.8.4 Are Subjective Business Performance Measures Justified?

However, one of the most challenging problems facing academic scientists today may be how to treat business performance (Cardinaels & Veen-Dirks, 2010). There is no consensus among the analysts with regard to the estimation of performance, according to writing in the field of business (Vij and Bedi, 2012; Silvestro, 2014). For estimating performance, experts have included both subjective and goal measures. However, the emotional component of performance is more frequently used (Ellis, 2006; Clercq et al., 2010; Santos & Brito, 2012). Subjective measures are for the most part relative while true measures are outright (Wall et al., 2004). The clients of subjective proportions of performance frequently depend upon the positive relationships amongst abstract and goal proportions of FP. A couple of studies (for example Dawes, 1999) have experimentally analyzed the connection among evenhanded and abstract proportions of performance (Table I). Most definitely, aside from the dimensionality, one more test is the choice of the sort of measure, for example objective versus subjective measures. Business performance can be characterized as the general file of the capacity of the firm to fulfill its partners, estimated concerning monetary as well as functional pointers, utilizing essential information to quantify "subjective business performance", secondary data to measure "objective business performance", or both.

Subjective measures are equipped for making cross-industry correlation (Brewer, 2006), however can definitely disapprove of normal source predisposition, social attractiveness, and manager inclinations (Stede et al., 2006). Overseeing a goal measure is a more aggressive errand than directing an emotional measure as key witnesses by and large feel hesitant to deliver delicate data to outcasts (Tang & Tang, 2012). They are for the most part leaned to give subjective assessment of their firm presentation (Wiklund and Shepherd, 2005). If there should be an occurrence of limited scope industry, where distributed information isn't accessible and respondents are for the most part hesitant to deliver objective truth and figures to outcasts, abstract estimation through

essential wellsprings of information assortment is just reasonable choice for estimation of business performance (Alasadi and Abdelrahim, 2008). Directors' emotional perspectives with respect to near execution (in correlations with industry or quick contenders) may uncover significant advantageous data (Delaney and Huselid, 1996), for example whether the development example of a firm strays considerably from industry or it is just pulled along by market patterns (Thomas et al., 2008). Subjective measures might be more suitable than true measures for looking at FP in cross-industry studies. This is on the grounds that benefit levels can differ impressively across ventures, clouding any connection between the free factors and company performance. Subjective measures may be more fitting in this present circumstance since directors can consider the overall exhibition of their industry while giving a reaction (Govindarajan, 1984; Dawes, 1999). The previous analysis and discussion demonstrate that it is possible to estimate an association's presentation using both subjective and objective measures of business performance. Since both consider monetary as well as functional pointers, neither the subjective nor objective proportion of FP is superior to the other. However, a significant level of relationship was discovered that supports the use of subjective firm performance measures for cross-industry correlation and directs leaders' attention to factors that are crucial for developing skills for achieving important associational goals. According to some earlier studies (such as Dess & Robinson, 1984), a significant level of positive relationship between subjective and objective business performance was once again discovered.

8.8.5 Empirical Results of Subjective and Objective Measure

Subjective and objective financial performance analysis contains several sections such as subjective measure consider the perception data from the sample survey. Financial performance is the criteria of measures the subjective measure. On the other hand, secondary data from the annual report of the respected companies were used as objective measure of financial performance. Return on asset, return on equity, return of sales was the key components of the objective measure.

Though, the reliability statistics has been presented by Cronbach's Alpha in Table 8.33. Cronbach's Alpha, the reliability test, shows the value 0.743 which is suitable to conduct SEM for testing the subjective and objective measure.

Table 8.34: Reliability Statistics

Cronbach's Alpha	N of Items	Condition	Decision
.743	7	CA>0.70	Accepted

Table 8.34 put on view an acceptable KMO value of 0.799, indicating a sufficient sample size with an acceptable value. Factor loading values also estimated where the component 1 and second component have the loding factors for each items is greater than 0.70 that is expected. Eigenvalue for subjective analysis is 6.965 and objective analysis is 0.034. Estimated cumulative % of explained variance is 94.669.

Table 8.35: Factor Structure of Subjective and Objective Analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.799		
Bartlett's Test of Sphericity	Approx. Chi-Square	1162.442		
	df	21		
	Sig.	.000		
Component Analysis				
	Items Name	Factor Loading	Factor Loading	
Component 1	FP_1	.918		
	FP_2	.919		
	FP_3	.901		
	FP_4	.819		
Component 2	ROA		.881	
	ROE		.882	
	ROS		.885	
Eigenvalues and Total Explained Variance				
	Name of Factors	Eigenvalues	% of Explained Variance	Cumulative % of Explained Variance
Component 1	Subjective	6.965	54.477	54.477
Component 2	Objective (Profitability)	0.034	40.193	94.669

The consistency of the model output has been presented in Table 8.35. The Chi-square is 64.191 and it is significant at 1% level. The level of discrepancy CMIN/DF is 4.01 which are acceptable.

The goodness of fit (R^2) criteria shows the values 0.76 and AGF (Adj. R^2) is 0.58 both are acceptable. However, the covariance between the subjective and objective measure is positive.

Table 8.36: Model Fit Evidence

Criteria	Statistics/ Value	Decision
Chi-square	Value = 64.191 (Prob= 0.00)	Acceptable
CMIN/DF	4.00	Acceptable
R^2	0.76	Acceptable
Adj R^2	0.65	Acceptable

Figure 8.6 state the subjective and objective measure of financial performance. A subjective measure that takes into account the perception data from the sample survey is one of the sections of the subjective and objective financial performance analysis. Financial performance serves as the measurement criterion for the subjective assessment. However, secondary data from reputable corporations' annual reports was utilized as objective measure of financial performance. Return on asset, return on equity, return of sales was the key components of the objective measure, objective measure attain by profitability value.

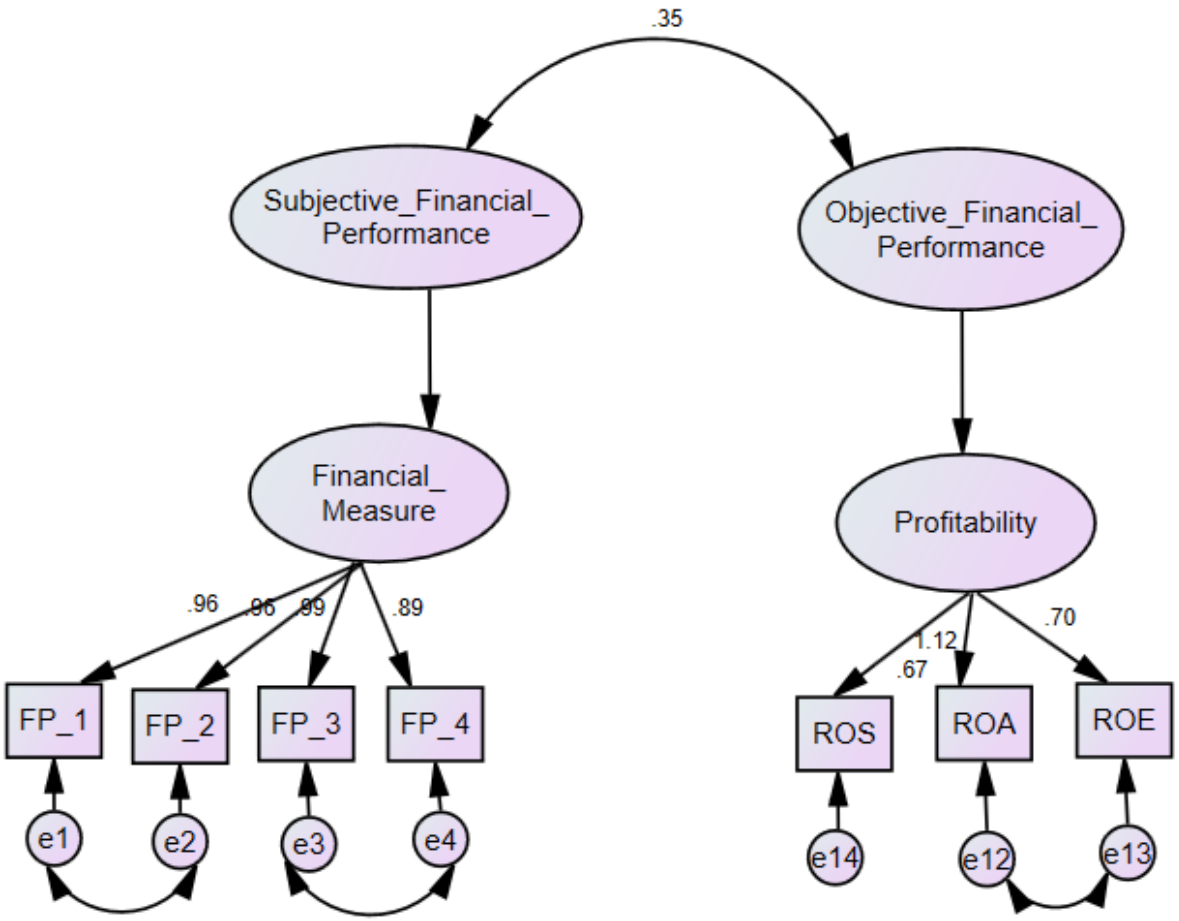


Figure 8.6: Subjective and Objective Measure of Financial Performance

The coefficient of return on sales is positive, and the value is 0.67. One percent rise in return on sales (ROS) able to raise profitability 0.67% as part of objective measure. Coefficient of return on asset (ROA) of the company is positive 1.12. One percent increase in ROA raise of company profitability 1.12%, both results are significant. ROA increase the firm's profitability which is founded by Panigrahi and Vachhani (2012), Purnamasari (2015), Kurniawan (2021), Mudzakar (2021). Coefficient of return on equity (ROE) of the company is positive, and the value has been shown 0.70. One percent increase of ROE raise of company profitability 0.70% and result is significant at 1% level. ROE increases the firm's profitability which is similar with Khan (2021), Pasaribu (2021) and Sitepu (2022). The specific result between the two groups is 0.35 that means the representation of subjective measure and objective measure is highly reliable and there is a

strong relationship between the group of subjective measure and objective measure. The consistency rate of results estimations between the two groups is 35% which is highly expected to minimize the gap between the analysis of primary as (subjective measure) and secondary data as objective measure. However, this measure shows the expected sign of the coefficient between the subjective and objective measure.

8.9 Operationalize the Subjective Measure and Objective Measure of FP

To operationalize a subjective measure of financial performance to manufacturing industries in Bangladesh, it is important to have a clear conceptual background and methodological rationale why the use of subjective indicators can effectively complement or in other cases replace objective financial data. Subjective financial performance is the perceptions of the managers or owners of the profitability of their firm, sales growth, payback on investment, market share, or financial health, typically determined by the Likert-type scale survey responses. The perceptual indicators are popular in management, strategic and organizational studies particularly in the developing economies whereby the financial data is reliable and standardized. A large number of firms in the manufacturing sector are privately owned, or family owned or have an informal reporting environment and thus, audited financial statements are hard to get, inconsistent or non-existent in Bangladesh. Therefore, subjective financial performance emerges as a critical methodology that can be used to record firm-level performance when objective data are limited.

The use of subjective measures is highly encouraged in literature in management and industrial organization. Early research by Dess and Robinson (1984) illustrates a high degree of convergence between perceptual measures of financial performance and objectively measured variables like ROA or sales growth making their application in the scenario where financial data are unavailable justified. Later studies in small and medium firms, developing economies and family firms have established that subjective ratings by managers are valid proxies since they represent internal standards of performance, future expectations and comparative ratings with competitors. Additionally, subjective measures can reflect contextual realities like the informal credit relationships, cash flow which is not documented or seasonal factors in a sector which objective indicators cannot always capture. The perceived performance of the owners or the managers in the

manufacturing industries in Bangladesh where reporting standards are not uniform, and many companies fail to publish financial statements can thus provide a more subtle picture of the competitiveness and the success of operations.

Subjective measures also reflect strategic aspects of performance that objective measures fail to reflect. Perceptions bring in future oriented decisions regarding financial robustness, brand equity, manufacturing efficiency, and positioning in the market, which are of great importance to the industries experiencing increased competition in the world, disruption of supply-chain and regulatory stress. As an example, export-oriented manufacturing companies can consider the performance based on the existing profitability and the prospects of meeting the global quality standards, keeping up with the technological upgrades and the prospects of a future export contract. Such insights contribute to the development of empirical models that have an association between financial performance and internal capabilities, a relationship between innovation behavior, managerial quality, and operational strategies with purely accounting-based indicators that may be underestimated. Surveys of the manufacturing industries of the developing countries have indicated that subjective measures tend to be especially useful when intangible or non-financial aspects of long-run financial success have to be measured.

Also, subjective financial performance increases cross-firm comparability in the setting that has uneven objective data. The accounting systems, tax compliance, depreciation of assets, and record-keeping in Bangladesh are not consistent and create problems in the reliability of the financial ratios at the firm level. Perceptual measures carried out in the form of a survey bring standardization of responses across firms and help the researcher compare the performance on the same scales. They also minimize the non-response bias since companies are not likely to reveal confidential financial numbers, but they tend to feel more comfortable giving scaled perceptions. Empirical studies have shown that with subjective measures, there is an upsurge in the sample size, data completeness, and also external validity of research in a sector where data access is limited. Nevertheless, the subjective determination of the financial performance in the manufacturing industries in Bangladesh is conceptually well-grounded as well as empirically justified. It enables the investigators to span correct, relative and contextually based arguments of company efficiency in the event that objective measures are missing or untrustworthy. Perceptual measures are plausible alternatives and supplements to accounting-based measures, supported by not only strong

literature but also methodological validation, which provides a viable and theoretically informed strategy to evaluate financial performance in the case of manufacturing in developing economies.

8.10 Conclusion

The foregoing analysis and discussion makes it amply clear that both subjective and objective measures of business performance are capable for measuring the performance of an organization. Neither of the subjective or the objective measure of business performance is superior to the other; as both are considering financial as well as operational indicators. However, a positive degree of correlation found in this study supports the use of subjective financial performance measures for making cross-industry comparison and draw the attention of the decision makers towards factors that are crucial for building capabilities for the achievement of strategic goals of an organization.

The study finds a positive correlation between subjective financial performance and objective financial performance, in line with some previous researches (e.g. Dess and Robinson, 1984; Pearce et al., 1987; Venkatraman and Ramanujam, 1987; Dawes, 1999; Wall et al., 2004). Based upon the challenges of gathering objective data for financial and operational indicators on the one hand; and drawbacks of using objective data in certain situations on the other, the study finds it justified to use the subjective measures of financial performance (as there is strong correlating between subjective and objective measures).

Chapter 9

Impact of Mediating Variable Rationalized Managerial Decision (RMD)

9.1 Introduction

Accounting functions as an information system, and it is crucial for managers to acquire high-quality and appropriate information from both formal and informal sources in order to make informed decisions (Zare et al., 2016). In the early 1990s, there was a revaluation of managerial accounting, resulting in a division between the two components of the accounting system: financial accounting and managerial accounting (Cardo & Pete, 2011). Assume that each entity has the autonomy to establish its own information system, including communication channels and responsible individuals, then we can define the information system of management accounting as the combination of procedures, resources, and regulations employed for the collection, processing, transmission, utilisation, and storage of accounting information, while ensuring its confidentiality from the public (Briciu & Teiuan, 2006). To establish the inclusion of management accounting within the accounting information system, we will examine the role of this accounting practice in the operation of the overall accounting system. Management accounting, also known as analytic accounting, offers a comprehensive analysis of various activities. It involves collecting and distributing expenses related to activities, as well as calculating costs from production, trade, service provision, financial units, and other areas of operation. This process generates essential data for users of accounting information. Managerial accounting is a crucial aspect of management that involves the identification, presentation, and interpretation of information. This information is used for strategic planning, decision making, optimising resources, providing employee information, planning asset protection, and controlling activities. It also includes information for external users such as associates or other external parties (Briciu & Căpuşneanu, 2011). According to Professor Oprea Călin, the main goal of management accounting is to analyse and record all costs associated with different aspects of a business, such as products, services, orders, manufacturing processes, activities, and departments. This includes calculating the production cost for manufactured products, completed works, and provided services, including those that are still in progress (Călin, 2002). Managers oversee and communicate the future trajectory of their organisation (Bouquin, 2004), whereas management accounting supplies knowledge regarding

future events and developments (Diaconu, 2006). The demand for information typically arises from the necessity to make judgements. Regardless, information must adhere to the three criteria established by Emery (Emery, 1969): 1) information is deemed valuable to managers if it aids in mitigating future uncertainty; 2) supplementary information is considered valuable if it has the potential to influence the corresponding decision; 3) information is considered valuable if it facilitates the ability to modify the outcomes of a decision in a nuanced manner. Management accounting is a specialised field that focuses on giving information to managers. It is regarded an essential tool for decision-making and maximising profitability (Dumitru et al., 2008).

9.2 Strategic Decision-making and the Role of Management Accounting

According to Otley (2016), there is a robust and favourable correlation between management accounting and the process of making decisions. Consequently, management accounting assists organisations in making critical business decisions. Otley further emphasised that one of the primary determinations that organisations make through management accounting is the preservation of a competitive position. Furthermore, management accounting is well recognised for its role in facilitating the development of cultural values, facilitating organisational activities, incentivizing behaviours, and providing guidance for managerial decision-making (Richardson, 2017). However, the primary emphasis of management accounting is on addressing the internal requirements of management. Alternative theories propose that the significance of management accounting is solely focused on the dissemination of information (Dávila, 2019; Richardson, 2017; Trucco & Trucco, 2015). Managers rely on information to make choices, and one of the most effective methods of acquiring this information is through the use of management accounting. The information encompasses several aspects such as acquisitions in finance, risk analysis in investment, integration in strategic management, and product pricing in marketing. Managers obtain pertinent information for their decision-making, which is frequently provided by management accountants. Hosomi et al. (2017) demonstrated that management accounting facilitates the gathering, analysis, and distribution of information to support decision-making. Moreover, the utilisation of management accounting enables companies to tailor their operational norms to conform with predefined criteria (Trucco, 2015). Management accounting adheres to a certain set of internationally recognised accounting standards. Therefore, it is possible to compare

the actions and results of the business with those of other firms, particularly international companies.

According to Richardson (2017), managers rely on information from management accountants to make strategic decisions. This information can be categorised into several elements or categories, making it easier to assign responsibilities to management. Specifically, the information can be categorised into production, sales, marketing, and batch, among other categories. This will enable each manager to concentrate on a particular department or organisational function. Consequently, performance evaluation and measurement can be carried out with a particular focus on individual departments or activities. Furthermore, it becomes comparatively effortless to manage organisational activities and reorient each activity to coincide with the specified organisational objectives. However, it is crucial to acknowledge that managers are not solely limited to quantitative data. In addition, they make decisions based on unquantifiable information, which may include qualitative data (Trucco, 2015). Managers must take into account a multitude of aspects, which is why it is necessary. This assertion is substantiated by the concepts put out by Drury (2000), who demonstrated that factors such as self-promotion, conflicts for authority, territorial disputes, insignificant rationales, moral beliefs, intuition, and personal experience play a role in decision-making. Therefore, effective decisions can be defined as decisions that encompass both the quantitative and qualitative elements of information. Moreover, judgements are based on several sorts of frameworks, which can be categorised as either long-term or short-term. These distinctions have significant consequences for the decision-making process. Short-term decisions typically prioritise the avoidance of issues arising from fluctuations in the value of money over time, whereas long-term decisions emphasise factors like survival and expansion (Azudin & Mansor, 2018). Regardless of the decision-making methods organisations employ, they must consider that the decision will affect the firm's long-term operating capability and efficiency. Hence, the consideration of time is crucial for enterprises when making decisions, particularly in the context of management accounting in telecommunications companies.

9.3 Empirical Studies

However, the primary reason for the use of various management accounting approaches is the presence of resources. Organisations with greater resources are more capable of effectively utilising sophisticated management accounting procedures. Conversely, it was found that the inability to obtain important information, excessive regulatory limitations, insufficient communication, and a shortage of competent workers were the primary obstacles to implementing contemporary and efficient management accounting methods. The results diverged significantly from the conclusions given by Isa and Thye (2006) and Salawu et al., (2012) as they placed particular emphasis on the significance of having sufficient cash to execute the intended strategies. The inadequate financial resources impede the optimal utilisation of management accounting by companies. Tewodros (2009) conducted a study which argued that management accounting can be utilised to efficiently make decisions and control organisational activities. The fundamental concept was that management accounting can facilitate the gathering of crucial data. The information is subsequently processed and disseminated to other management, who utilise it to make logical decisions.

The decision-making process entails the management of costs and the optimisation of revenue, ultimately resulting in the maximisation of profits. Furthermore, the same study argues that management accounting can serve as a component of performance evaluation methodologies, allowing for the assessment of both employees and managers' performance. Additionally, it was suggested that there are substantial disparities between companies that employ management accounting and those that do not. Consequently, it was deduced that companies that employ management accounting are significantly more advantageous in making well-informed choices. The results indicated that the application of management accounting is more significant in relation to the specific circumstances in which it is used. The establishment of management accounting has had significant positive impacts on the decision-making processes of private sector organisations. Implying that management accounting does not invariably result in enhanced decision-making. One potential explanation could be the absence of profit-oriented objectives inside public sector enterprises. These companies lack a consistent motivation to generate revenues.

Study, Mintesnot (2013) especially examined the impact of management accounting on decision-making processes inside engineering organisations. The study aimed to ascertain the methods by which managers obtain information through the utilisation of management accounting, which involves the gathering and analysis of data. The premise posited that managers who possess adeptness in gathering information are strategically positioned to make astute decisions that mitigate expenses and augment revenue generation (maximise earnings). Therefore, it was assumed that the additional functions of management accounting would be influenced by the firm's capacity to gather superior and increased information while utilising less resources and at a comparatively reduced expense. In addition, the study contends that management accounting possesses distinct strengths and disadvantages. Recommendations were proposed indicating that managers should implement efficient strategies aimed at mitigating the impact of these deficiencies, necessitating the enhancement of the current functions of management accounting. Consequently, it necessitates greater exertion in enhancing the gathering, handling, and dissemination of information, as well as the formulation of financial reports through the utilisation of management accounting.

9.4 Research Hypotheses

This study tried to test the MAP and FP relationships using structural equation modeling through the mediating effect of RMDs. Four test hypotheses were tested as follows:

i) MAP and FP

Polnaya et al. (2018) found a correlation between MAP and FP in their previous investigations. Nor et al. (2016) investigated the correlation between MAP (Management Accounting Practice) and the financial performance of Malaysian manufacturing companies listed on the stock exchange. The study revealed a significant association between these factors. Implementing more appropriate Management Accounting Practice (MAP) can enhance employees' concentration on attaining differentiation goals (Seal, 2006), including efficiency, distribution and customer support, customer loyalty, and strategic competitiveness performance. Target costing enables managers to focus on minimising costs while still meeting customers' expectations for quality and usefulness. Implementing MAP can enhance the organization's ability to achieve great FP.

H3a (similar with H_2): MAP have a positive and significant impact on FP

II) MAP and RMDs

Management Accounting Practice (MAP) are regarded as contextual techniques that furnish decision-makers with knowledge to guarantee organisational effectiveness (Chenhall & Euske, 2007; Moores & Yuen, 2001). In the current highly competitive business market, decision-makers need to prioritise the variables that contribute to the additional value, particularly for customers (Bisbe et al., 2007). An uncomplicated and direct company approach has the potential to create value for customers and set them apart from competitors (Simons, 1987). Nevertheless, a company plan in isolation is insufficient to attain a competitive edge; it necessitates proactive management techniques that furnish managers with current knowledge for making economic judgements.

H3b: MAP have a positive and significant impact on RMDs

III) RMDS and FP

Inadequate information management can result in inefficient allocation of resources and a gradual deterioration in financial performance (Wahyuni & Triatmanto, 2020). The rationalisation of managerial decisions enables the progress of strategic plans, effective allocation of resources, and improved corporate efficiency.

H3c: RMDs have a positive and significant impact on FP.

IV) Mediating effect of RMDs on MAP and FP

MAP have been shown to be highly effective and efficient in managing intense market rivalry (Baines & Langfield-Smith, 2003; Hoque et al., 2001). The implementation of novel technology resulted in a streamlined manufacturing cost framework. Computer technology incurs both labour and inventory expenses and speeds up operational processes. Research has demonstrated a correlation between important management accounting practice, including as quality improvement programmes, benchmarking, and activity-based management, and RMD and financial performance (FP) (Baines & Langfield-Smith, 2003; Hoque et al., 2001, Wahyuni & Triatmanto, 2020). Here the developmed hypothesis already mentioned in literature section, H3: RMDs can

mediate the effect of MAP on FP. In order to get excellent financial results, it is important to create and utilise strategies as a tool for making decisions, as suggested by Wahyuni and Triatmanto (2020). The study sought to investigate the correlation between FP, treated as the dependent variable, and MAP, treated as the independent variable, while considering the mediating influence of RMDs.

9.5 Empirical Results and Discussion

This section has been measured the mediation analysis and mediating impact towards the latent and observed variables. A data reduction method called principal component analysis (PCA), together with Cronbach's Alpha, KMO tests, are utilised to find consistency of data The mediation analysis that is used to determine the mediating impact on the observe variables and latent variable. However, this study is going to analyse the mediating impact by using the variable rationalized managerial decision (RMD). Here the independent variables are considered the MAP and the dependent variable is financial performance of the selective manufacturing industries in Bangladesh. Table 9.1 shows the result of direct, indirect, and total effects of the mediation model where dependent variable is financial performance (FP) and the independent variable is MAP. With the presence of dependent and independent variable, there is a mediating variable entitled on rationalized managerial decision (RMD). Figure 9.1 state that the framework of mediation analysis.

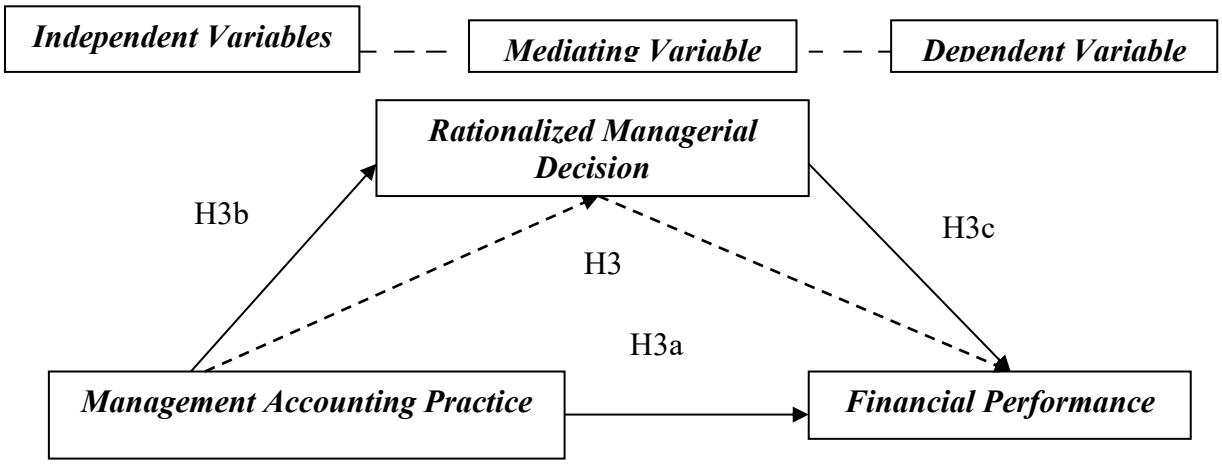


Figure 9.1: Framework of Mediation Analysis

However, results show that, total effect between the MAP and FP is positive, increase of MAP able to raise FP. The coefficient value is 0.483, one percent raise of MAP increase financial performance 0.483% and it is significant at 5% level. Total effect/direct effect between the MAP and RDM is positive, increase of MAP able to raise RMD. The coefficient value is 0.348 which is not significant. The total effect/direct effect of RMD towards FP is positive, one percent raise of RDM increase financial performance 0.25% and it is significant at 1% level. With the presence of mediating variable RDM, MAP has positive impact on FP, the mediation impact is significant and the coefficient value is satisfactory which is indicated by indirect effect 0.393 and the result is significant at 1% level.

Table 9.1: Direct, Indirect, and Total Effects of the Mediation Model

	Direct Effect	Indirect Effect	Total Effect	Remark
MAP -----> FP		-	0.483**	Significant
MAP -----> RDM	0.348	-	0.348	Not Significant
RMD-----> FP	0.25***	-	0.25***	Significant
MAP ----> RMD---> FP	0.09***	0.393***	0.483**	Significant

, * presents 5* and 1% level of significance

Table 9.2: Summary of Mediation Analysis

	Direct Effect without Mediator	Indirect Effect	Direct Effect with Mediator	Remark
MAP -----> FP Mediator: RDM	0.483**	0.393*** (Mediation Impact Exist)	0.09***	Mediation Impact Exist

, * presents 5* and 1% level of significance

Table 9.3: Model Fit Evidence

Criteria	Statistics/ Value	Decision
Chi-square	Value =211.124 (Prob= 0.00)	Acceptable
CMIN/DF	2.330	Acceptable
R^2	.692	Acceptable
Adj R^2	.610	Acceptable
RMR	.07	Acceptable

Table 9.4: Decision on Hypothesis

Hypothesis	**Coefficient Sign**	**Decision**
H3: RMDs can mediate the effect of MAP on FP.	0.09	Coefficient sign Accept (Significant)
H3a (similar with H_2): MAP have a positive and significant impact on FP	0.483	Coefficient sign Accept (Significant)
H3b: MAP have a positive and significant impact on RMDs	0.348	Coefficient sign Accept (Insignificant)
H3c: RMDs have a positive and significant impact on FP.	0.25	Coefficient sign Accept (Significant)

However the decision has been presented in the model summery, in Table 9.2 towards measure the relation between MAP and FP. As management accounting practice (MAP) is an independent variable, rationalized managerial decision (RDM) is mediating variable to measure the impact between the MAP and financial performance. Direct Effect without mediator variable RDM, coefficient of MAP is 0.483 and the direct effect with mediator variable 0.09. The mediator variable impact is significant, which is 0.393 and significant at 1% level. The final remark is mediation impact exists, rationalized managerial decision has significant impact on financial performance as a mediator, which is reduce the direct effect but it has greater indirect impact which has significant contribution towards achieving greater financial performance. The model fit evidence shows the R^2 value, goodness of fit is 0.692, and Adj R^2 is 0.610 in Table 9.3. RMR value is 0.07 that is acceptable, level of discrepancy 2.33 which is also acceptable. The last point to make is that there is a mediation impact and that rationalized managerial decisions have a major influence on financial performance. They have a less direct effect but a larger indirect effect, which goes a long way toward generating better financial performance. However this finding has been accepted the developed hypothesis H3, H3a, H3b (insignificant) and H3c and the results are statistically significant.

9.5 Conclusion

The study revealed that organisations are progressively adopting various management accounting techniques, although they have not attained significant effectiveness. This demonstrates the efficacy of management accounting, particularly in rationalized managerial decision. The utmost importance is in the quality of reports that are created to facilitate ultimate rationalized managerial decision towards on financial performance in manufacturing sector in Bangladesh.

Chapter 10

Conclusion and Recommendations

10.1 Introduction

The manufacturing sector is a significant contributor to the economy of Bangladesh, playing a crucial role in terms of economic growth, employment generation, export earnings, and industrial development. The sustained growth and competitiveness of this sector are essential for the continued economic progress of the country. Research on Management Accounting Practice (MAP) is vital for the manufacturing sector in Bangladesh to enhance competitiveness, navigate global markets, ensure regulatory compliance, and foster sustainable and inclusive growth in the context of a developing economy. The MAP in Bangladesh's manufacturing sectors is likely to be influenced by various factors, including economic conditions, technological advancements, regulatory environment, and globalization. To obtain the most accurate and up-to-date information on the status of MAP in Bangladesh's manufacturing sectors, it would be advisable to refer to recent research articles, industry reports, or publications from relevant professional bodies. Universities, research institutions, and industry associations may also conduct studies on this subject, providing valuable insights into the current state of MAP in the country.

This study focuses on the impact of MAP by companies in the manufacturing industry. However, there has been no prior research that specifically investigates the implementation of MAP in manufacturing enterprises, especially in a developing nation such as Bangladesh. This study examines a wide variety of MAP instead of concentrating on just one MAP or a small number of MAP. This research is unique in that it not only records the adoption of MAP by manufacturing organizations, but also explores the factors that influence the utilization of MAP. Additionally, it analyses the effects of MAP on the performance of enterprises in the manufacturing sector.

This chapter provides a condensed summary of the thesis, along with recommendations, areas of possible research interest, contributions to the body of current knowledge, and closing thoughts. The research findings are listed in Section 10.2, and the researcher's various recommendations are listed in Section 10.3. The next section identifies specific research contributions and suggests some new areas that future scholars could focus on. With the conclusion, the thesis is finally concluded.

10.2 Findings of the Research

The findings of the exploration are vital because of the way that this kind of examination is seldom led in Bangladesh situation and it opens the extent of leading explores around here in the near future. All things considered, the discoveries of this postulation will definitely function as a benchmark. The discoveries of the exploration have been talked about concerning watchwords in light of the review.

10.2.1 Management Accounting Practice

This exploration question examines the present status of the degree of purpose of MAP in the assembling organizations in Bangladesh. Five sub-divisions for MAP (costing, planning, execution assessment, navigation and SMA) were distinguished. This examination researched the particular degree of purpose of a scope of explicit MAP by assembling organizations in Bangladesh itemizing the degree of purpose of 46 administration bookkeeping strategies under five wide headings of MAP.

Monetary based MAP , for example, full monetary planning, monetary execution measures, item benefit examination and customary costing frameworks, for example, process costing, variable costing and occupation costing, were generally utilized by both little and medium estimated undertakings. Once more, the outcomes affirm that the utilization of conventional administration bookkeeping methods was somewhat higher than the utilization of all the more as of late evolved administration bookkeeping rehearses.

(a) Separation of variable and Fixed cost (4.0513), Absorption Costing/ Full cost accounting (3.8974), Department or multiple plant-wide overhead rates (3.8205), Process costing (3.6538) and Batch costing (3.0256) are the popular traditional costing systems used in Bangladesh. Among contemporary costing Activity based Costing (ABC) (2.7692), Throughput Costing (2.0385) and in term of uses of strategic costing, target costing, Life Cycle Costing are mostly used practice.

(b) The influence of both conventional and current budgeting procedures is significant, since they shape the planning, resource allocation, and financial evaluation of organizations, eventually determining their financial well-being and achievement. Traditional budgeting practice are Budgeting for (short term) planning (3.9103), master budgets (3.8846). The other frequently used budgeting tools are Budgetary Control (3.7051), Budgeting for controlling cost (3.6154) and Flexible budget (3.1923) are frequently used. As contemporary techniques, Zero-based budgeting (3.1026) is broadly used practice.

(c) The most frequently used traditional performance evaluations systems are cash flow statement analysis (4.2821), income statement & balance sheet analysis (4.2308), ratio analysis (4.0256). The use of Economic value adds (EVA) or Residual income (3.7692) is increasing as contemporary tools performance evaluations.

(d) The overall mean values of traditional performance evaluation system are 3.803, contemporary performance evaluation system is 2.649 and the mean value of non-financial measure of performance evaluation system is 3.202 that are exceed the benchmark category. The usage of Non-Financial performance evaluation practice are increasing day by day. The practice of Non-Financial performance evaluation are classified as nonfinancial measure operations oriented, nonfinancial measure employee oriented, nonfinancial measure Customer Oriented. The popular Non-Financial performance evaluation are Compliance with the processes (3.6538) Quality of product/services (3.6410), Absentee rate (3.3846) and Employee turnover (3.1923).

(e) In case of decision making, the uses of traditional short term decision making system is preferred by the manufacturing industries in Bangladesh. . The highest use among the tools of decision making is product profitability analysis (4.0385), contemporary tools in short term. The other frequently used short-term decision-making tools are Cost-Volume-Profit Analysis (3.8974) and Stock control models (Inventory) (3.8077). In case of long term decision making the respondent answered Evaluation of major capital investments based on pay-back period or average rate of return (3.7564), Evaluation of major capital investments based on discounted cash flow method(s) (3.6154), Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation (3.5769), Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation (3.6154) and For the evaluation of major capital investment, non-financial aspects are documented and reported (3.1667) as frequently used tools.

(f) The Strategic Management Accounting analysis has some factors such as strategic planning, customer accounting, strategic decision and competitor accounting where the most preferred practice is customer accounting (7.03) and the least preferred practice is competitor accounting (2.42).

The outcomes additionally showed that utilization of conventional MAP (costing frameworks and planning frameworks and execution assessment frameworks) was higher than for additional complex MAP (choice emotionally supportive network and SMA). The essentially lower reception

of refined MAP (somewhere in the range of 51% and 63%) rather than conventional MAP (76% to 83%) might be on the grounds that either the board is dubious of the importance of those practice for the somewhat little estimated of firms or on the grounds that administration knows nothing about them. Aside from that, since recently created MAP were made at first for huge firms particularly in created nations, firms in non-industrial nation might find opportunity to learn groundbreaking thoughts and procedures, particularly more modest estimated firms. Maybe, likewise a portion of the practice are not yet useful for firms in a non-industrial nation because of contrasts in culture, condition of innovation or level of market seriousness.

Table 10.1: Significance level of MAP

	Tools	Details	N	Minimum	Maximum	Mean	Std. Deviation
01	APES_2	Cash flow Statement Analysis	78	3.00	5.00	4.2821	.53202
02	APES_3	Income Statement & Balance sheet Analysis	78	2.00	5.00	4.2308	.60136
03	APES_4	Variance Analysis	78	1.00	5.00	4.0769	.87933
04	ACS_2	Separation of variable and Fixed cost	78	1.00	5.00	4.0513	.68181
05	ADM_2	Product profitability analysis	78	2.00	5.00	4.0385	.72868
06	APES_1	Ratio Analysis	78	2.00	5.00	4.0256	.68328
07	ABP_2	Budgeting for (short term) planning	78	1.00	5.00	3.9103	.79259
08	ACS_6	Absorption Costing/ Full cost accounting	78	1.00	5.00	3.8974	.97488
09	ADM_1	Cost-Volume-Profit Analysis	78	1.00	5.00	3.8974	.71332
10	ABP_4	Master budgets	78	1.00	5.00	3.8846	.96673
11	ACS_1	Department or multiple plant-wide overhead rates	78	1.00	5.00	3.8205	.83345
12	ADM_3	Stock control models (Inventory)	78	1.00	5.00	3.8077	.96776
13	ADM_6	Evaluation of major capital investments based on pay-back period or average rate of return	78	1.00	5.00	3.7564	.85563
14	ASA_1	Benchmarking	78	1.00	5.00	3.7179	.89584
15	ABP_1	Budgetary Control	78	1.00	5.00	3.7051	.94125
16	APES_5	Fund Flow Analysis	78	1.00	5.00	3.7051	1.03333
17	ACS_5	Process costing	78	1.00	5.00	3.6538	1.28757

18	NF_6	Compliance with the processes	78	1.00	5.00	3.6538	.69929
19	NF_5	Quality of product/services	78	1.00	5.00	3.6410	.70203
20	ABP_3	Budgeting for controlling cost	78	1.00	5.00	3.6154	1.03486
21	ADM_5	Evaluation of major capital investments based on discounted cash flow method(s)	78	1.00	5.00	3.6154	.97008
22	ADM_8	Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation	78	1.00	5.00	3.5769	.86067
23	NF_4	Absentee rate	78	1.00	5.00	3.3846	.72490
24	ASA_9	Strategic costing	78	1.00	5.00	3.3718	.94125
25	ASA_2	Integrated performance measurement system	78	1.00	5.00	3.3333	1.04031
26	ADM_4	Evaluation the risk of major capital investment projects by using probability analysis or computer simulation	78	1.00	5.00	3.3333	1.10096
27	ASA_5	Lifetime customer profitability analysis	78	1.00	5.00	3.3077	1.07278
28	ASA_4	Customer profitability analysis	78	1.00	5.00	3.3205	1.06288
29	ASA_3	Customer Accounting	78	2.00	5.00	3.2821	1.01799
30	ABP_5	Flexible budget	78	1.00	5.00	3.1923	1.08182
31		Competitive position monitoring	78	1.00	5.00	3.1923	1.29993
32	NF_3	Employee turnover	78	1.00	5.00	3.1923	.77389
33	ADM_7	For the evaluation of major capital investment, non-financial aspects are documented and reported	78	1.00	5.00	3.1667	1.03719
34	ABP_8	Zero-based budgeting (ZBB)	78	1.00	5.00	3.1026	1.16875
35	ADM_9	Performing sensitivity “what if” analysis when evaluating major investment project	78	1.00	5.00	3.0641	1.15477
36	ACS_4	Batch costing	78	1.00	5.00	3.0256	1.57887
37	ASA_11	Competitor cost assessment	78	1.00	5.00	2.9487	1.27816
38	ACS_3	Job order costing	78	1.00	5.00	2.8846	1.40482
39	ABP_10	Continuous/rolling budget	78	1.00	5.00	2.8333	1.34277
40	NF_1	Numbers of customer complaints	78	1.00	5.00	2.8333	1.10978
41	ACS_18	Activity based Costing (ABC)	78	1.00	5.00	2.7692	1.28854

42	ABP_9	Budgeting with "what if analysis"	78	1.00	5.00	2.6923	1.12015
43	ASA_7	Brand valuation	78	1.00	5.00	2.6154	1.33125
44	NF_2	Numbers of customer satisfaction	78	1.00	5.00	2.5897	1.01208
45	ACS_7	Standard costing	78	1.00	5.00	2.5256	1.33606
46	APES_6	Return on Investment (ROI)	78	1.00	5.00	2.5256	1.38381
47	ASA_6	Valuation of customer as assets	78	1.00	5.00	2.4103	1.21073
48	APES_8	Segment Reporting	78	1.00	5.00	2.2308	1.37627
49	ASA_13	Analysis of competitors' strength and weaknesses	78	1.00	5.00	2.1026	1.25450
50	ASA_12	Competitor performance appraisal based on published financial statements	78	1.00	5.00	2.0897	1.20805
51	ACS_20	Target Costing	78	1.00	5.00	2.0641	1.24149
52	ACS_21	Life Cycle Costing	78	1.00	5.00	2.0385	1.15593
53	ACS_19	Throughput Costing	78	1.00	5.00	2.0385	1.22148
54	ASA_8	Strategic Pricing	78	1.00	5.00	2.0000	1.06904
55	ABP_6	Budgeting for long term(strategic) plans	78	1.00	5.00	1.9872	1.23260
56	APES_9	Balance Scorecard	78	1.00	5.00	1.9487	1.12697
57	ABP_7	Activity-based budgeting (ABB)	78	1.00	5.00	1.8205	1.19244
58	ACS_8	Variable/ Marginal costing	78	1.00	5.00	1.8077	1.17393
59. ACS_25	Quality Costing		78	1.00	4.00	1.7564	.88547
60. ACS_24	Back-Flush costing		78	1.00	5.00	1.7308	.97599
61. ACS_23	Value Chain Costing		78	1.00	5.00	1.4744	.75118

Concerning the Table 10.1, the profoundly huge set contained 16 works on having the most elevated importance among the answering organizations with a normal of importance reaching out from 3.7051 to 4.2821 and the low critical set incorporated the leftover 15 practice with an importance normal stretching out from 2.5256 to 1.4744. It is essential that the least importance level given for the MAP was 3.5 (better than expected huge), and this demonstrate that practically every one of the MAP involved by assembling organizations in Bangladesh are of high significance for them. For reason for examining the execution and importance level of The board Bookkeeping Practice, the scientist talked about the discoveries regarding conventional and

present day MAP. Regarding the highest significance set of MAP, the majority of practice contained were traditional in nature, performance evaluation relied on Cash flow Statement Analysis, Income Statement & Balance sheet Analysis, Variance Analysis , Separation of variable and Fixed cost, Product profitability analysis, Ratio Analysis, Budgeting for (short term) planning, Absorption Costing/ Full cost accounting, Cost-Volume-Profit Analysis, Master budgets, Department or multiple plant-wide overhead rates, Stock control models , Evaluation of major capital investments based on pay-back period or average rate of return, Benchmarking, Budgetary Control. This demonstrates that the conventional MAP are the most ordinarily utilized among assembling area in Bangladesh regardless of the surge of analysis of these practice revealed by MAP studies. It is essential that these customary practice are connected with conventional preparation and controlling frameworks, execution estimation framework in view of monetary instruments, and conventional costing framework. It tends to be noted from this table that most of MAP contained in the profoundly critical set were customary MAP additionally 6 out of them were from the high execution rehearses set. Again, most of the MAP (15) contained in the low implementation set were from the traditional type, namely, Value Chain Costing, Back-Flush costing, Quality Costing, Variable/ Marginal costing, Activity-based budgeting (ABB), Balance Scorecard, Budgeting for long term(strategic) plans, Strategic Pricing , Throughput Costing, Life Cycle Costing, Target Costing, Competitor performance appraisal based on published financial statements, Analysis of competitors' strength and weaknesses Segment Reporting, Valuation of customer as assets, Return on Investment (ROI), Standard costing . Additionally, 6 out of these 15 practice were indicated as having a low significance level by the responding companies (they are included in the low significance set). Nonetheless, this give backing to the way that the conventional MAP are the most generally being used in Bangladesh. With respect to MAP, two practice out of them were contained in the high execution set, to be specific, productivity examination and arranging depending on Benchmarking. Additionally, the low execution set included three current practice, in particular, Worth Chain Costing, Back-Flush costing and Quality Costing. This infers that the low execution pace of these practice may be connected with them being extremely cutting-edge rehearses and these requires an organization to have satisfactory experience, skill and high asset to carrying out them.

At long last, concerning the MAP that were declared as being not utilized by the answering organizations (9 practice), most of them, to be specific, the ABC framework, movement based

planning framework, execution assessment depended on lingering pay, ABM framework, TC framework, and life-cycle costing frameworks, were present day MAP . This affirms that the conventional MAP are generally the most widely recognized among the answering organizations. To close, the exploration discoveries exhibit restricted execution of present day MAP in Bangladesh, as opposed to additional customary MAP, which predominant. This doesn't, nonetheless, go against past MAP studies directed in created and LDCs, which have expressed that conventional MAP are yet the most famous among organizations, for models, Drury et al. (1993), Chenhall and Langfield-Smith (1998a), Guilding et al. (1998), and Adler et al. (2000). This postulation is hence strong of existing discoveries.

10.2.2 Contingent Factors

This research has enhanced the present understanding of the elements that influence the utilization of MAP in manufacturing enterprises in a developing country, by building upon the concept of contingency theory. The results suggest that multiple access points might be affected by internal issues within the organization. This research has addressed the recent demand for more contingency-based research in management accounting. The goal is to improve our understanding of the various factors that influence the use of MAP. This research expands upon the existing knowledge base that applies contingency theory to examine the importance of contingency variables in the context of enterprises.

In order to assess the influence of contingent factors on the degree of utilization of management accounting methods, the variables organization size, organization age, owner's participation and technology exhibit a positive impact on the adoption of such practice. However, the variable QUL has a negative coefficient. The increase in organizational size by one percent leads to a modest 0.049% rise in the utilization of MAP, but this outcome is not statistically significant. The ownership coefficient practice has a value of 0.502. An increase of one percent in ownership practice leads to a notable improvement in the utilization of MAP, namely by 0.502%. This outcome is statistically significant at a 1% level of significance.

Overall the results indicate that some use of particular MAP depends upon specific contingent factors. Four out of five contingent factors; size of the firm, age of the firm, owner's participation and use of information technology have a positive relationship with the use of certain MAP. On the other hand, qualification of accounting stuff is negatively with the use of MAP. Therefore, it

is probable that the use of MAP within the firms internally when the owner is committed to their use.

10.2.3 Management Accounting Practice and Financial Performance

In this part, the tests for association analysis aim to address the fourth research goal of this study: to investigate the connection between the utilization of MAP and the firms' performance. The aim is reflected in the second hypothesis stating that a significant and positive correlation exists between the utilization of MAP and the financial outcomes of manufacturing firms. The data nature in Table 10.2 outlines which test is appropriate for hypothesis testing based on the relationship being studied.

Table 10.2: A summary of the type of data of independent and dependent variables under the second hypothesis

	Details	**Types of Data**
Dependent variables **Financial Performance**		
Return on Asset (ROA)	**5-Likert scale**	**Ordinal**
Return on Equity (ROE)	**5-Likert scale**	**Ordinal**
Return on Investment (ROI)	**5-Likert scale**	**Ordinal**
Return on Sales (ROS)	**5-Likert scale**	**Ordinal**
Independent variables **Management Accounting Practice**		
Costing system	**5-Likert scale**	**Ordinal**
Budgeting system	**5-Likert scale**	**Ordinal**
Performance evaluation system	**5-Likert scale**	**Ordinal**
Decision support system	**5-Likert scale**	**Ordinal**
Strategic management accounting	**5-Likert scale**	**Ordinal**

Four indicators are employed to measure perceptions of the firm performance. These indicators are measured using a five-point Likert scale (1 is "Very **low extent** "to 5 "**Very large extent"**).

Management Accounting Practice (MAP)	***Hypothesis***	**Correlation coefficient**	Sig. value
Costing	*H2a*	0.93	
Budgeting	*H2b*	0.85	
Performance Evaluation	*H2c*	0.44	
Information for Decision Making	*H2d*	0.89	
Strategic Management Accounting	*H2e*	0.30	

1. Costing system is a significant predictor of performance in management accounting, with a β coefficient of 0.93 and a p-value of 0. 045) during the regression analysis. These results indicate that the costing system positively influences financial performance. This suggests that a rise in the use of costing techniques by respondents will result in a 0.93 increase in financial performance, and vice versa, keeping all other factors constant. The findings align with Elhamma and Zhang's (2013) research that showed how the use of activity-based costing leads to improved performance in businesses. Hence, in order to boost efficiency, management techniques and policies should focus on enhancing the cost system.
2. Budgeting was identified as a predictor with statistical significance and was also responsive to financial performance. Analyzing the data, it is evident that the Budgeting system has a significant coefficient (β: 0.85; p-value: 0.001), indicating that a one percent increase in budgetary control will lead to a 0.85 increase in financial performance, while a one percent decrease will negatively impact organizational performance under constant conditions.
3. The financial performance evaluation technique has a coefficient of 0.44 and a P-Value of 0.065. This also suggests that enhancing the use of financial performance evaluation methods will result in an extra 0.44 improvement in the financial performance of those surveyed. Alternatively, if the utilization of financial performance evaluation techniques is reduced or not implemented, the financial performance will decrease by 0.44.
4. The research indicates that an increase of one unit in Information for Decision Making practice results in a performance boost of 0.89 times with a p-value of 0. These results demonstrate that the data used for decision-making has a meaningful effect on the performance of manufacturing companies in Bangladesh.

5. The team's performance was not up to par in their latest game. Strategic analysis is another management accounting practice that has influenced performance. The beta values indicated that strategic analysis was a significant predictor (β = 0. 30; probability equals zero. 073) This indicates that strategic analysis positively affects performance, although not to the same extent as other factors.

The research concentrated on management accounting practice and performance of manufacturing companies in Bangladesh, where the study's broad focus was narrowed down to a specific objective. The research analyzed how management accounting practice affect the financial performance of manufacturing companies in Bangladesh. The research validates that management accounting techniques like costing systems, budgeting, performance evaluation, decision-making information, and strategic analysis impact the performance of manufacturing companies in Bangladesh. This research adds to the existing knowledge in the field of management accounting by offering up-to-date perspectives on both literature and research methods. In this way, the paper can serve as a resource for future researchers studying similar topics.

This study further demonstrates that management accounting practice depends on organizational financial performance. In accordance with the contingency theory, the variables that substantially account for changes in a variable are known as contingencies (Morton & Hu, 2008). Hence, the importance of management accounting variables in explaining differences in financial performance levels shows that organizational financial performance depends on these variables.

10.2.4 Subjective and Objective Analysis

Business performance refers to the firm's capacity to meet the needs of its stakeholders, assessed through financial and operational indicators, using primary and secondary data to evaluate both subjective and objective performance. Researchers have utilized both subjective and objective measures to assess performance. Wall et al. (2004) stated that subjective measures are usually proportional while objective measures are fixed. Those who utilize subjective performance measures often depend on the strong links between subjective and objective performance measures. Research conducted at the firm level in the United States and other advanced nations has empirically analyzed the link between objective and subjective indicators of performance.

Testing the relationships in developing countries is also necessary. This study aims to fill the gap by conducting research in the context of Bangladesh.

The research shows a direct connection between how a business is perceived to be performing and how it is actually performing, similar to what has been found in prior studies (e.g. Dess and Robinson, 1984; Pearce et al., 1987; Venkatraman and Ramanujam, 1987; Dawes, 1999; Wall et al., 2004). The outcome for both groups is 0.35, indicating a strong and reliable relationship between subjective and objective measures. It is highly anticipated that the 35% consistency rate in result estimates between the two groups will help reduce the difference between the subjective evaluation of primary data and the objective analysis of secondary data. The study concludes that using subjective measures of business performance is justified due to the difficulties of collecting objective data for financial and operational indicators and the limitations of using objective data in some cases, as there is a strong correlation between subjective and objective measures.

10.2.5 Mediating Effect

The research focused on investigating how management accounting practice impact the performance of companies, specifically their financial performance, while considering the mediating influence of Rationalized Managerial Decision in listed manufacturing firms in Bangladesh. Yet, mediation analysis uncovers that there is a positive overall effect between the MAP and FP, with a coefficient value of 0.483. This relationship shows statistical significance at a 5% level.

Once more, the direct impact from the MAP to RDM is beneficial as higher MAP can raise RDM. Even though the coefficient is 0.348, it is considered not significant from a statistical perspective. The general effect of RMD on FP is positive. The correlation between RDM and FP is 0.25%, showing statistical significance at the 1% confidence level.

The presence of the intermediary RDM has a positive effect on FP. An indirect effect is implied with a significant result at the 1% level. The coefficient of MAP measures the direct effect of the independent variable, without a mediator variable, and is 0.483. However, if a mediator variable is present, the direct impact is 0.09. The mediator variable exerts a significant influence, with a coefficient of 0.393 and a significance level of 1%. The third point to note is that mediation's

presence has an impact. The rationalized managerial decision acts as a significant mediator, lessening the immediate influence while creating a larger indirect effect. This indirect effect plays a key role in attaining improved financial results.

Based on the key findings and the various conclusions drawn the following recommendations are made:

1. Manufacturing companies need to create and execute efficient management accounting systems. Promote active involvement of managers and owners in implementing management accounting systems within the manufacturing industry to improve management accounting practice. Manufacturing companies need to regularly evaluate their management accounting methods to ensure they are effective, address any inefficiency, and utilize experts for assistance in optimizing performance.
2. Manufacturing companies in Bangladesh prefer using traditional methods over modern and advanced MAP. The primary role of MAP was to offer important information to assist managers in making informed decisions. Insufficient information sharing could contribute to inefficient resource allocation and reduced performance. Therefore, the customization of MAP needs to take into account the specific context. Tailored MAP that align with business operations can lead to competitive edges and enhanced performance. This is because efficient MAP allow employees to focus better on meeting unique requirements, which can assist in meeting and enhancing customer expectations, especially in terms of quality and utility.
3. Manufacturing firms, particularly local ones, should implement suitable measures to utilize advanced MAP for effective and practical decision-making to achieve wealth maximization. Additionally, professional accounting organizations and schools should work together to incorporate Strategic Management Accounting into their curriculum to prepare professionals for practicing SMAP. Additionally, it is crucial for management to prioritize the enhancement of their management accounting information system as it serves as a key tool in aiding managers to make informed decisions and enhance internal business operations.
4. The skilled accounts staff in Bangladesh must transition to a more strategic role instead of an administrative or operational one. The findings suggested a negative relationship

between the qualifications of accounting personnel and the utilization of MAP in Bangladesh. The skilled accounting staff must encourage the utilization of modern or sophisticated management accounting instruments to improve the standard of management accounting data. Various factors have been taken into account for prompting changes, including technology for large companies and the quality requirements for medium-sized ones.

5. In addition, it must collaborate closely with accounting education to train students to become competent management accountants in the future. The accounting syllabus must be regularly updated to align with the evolving responsibilities of accountants. Accounting Education needs to ensure that their students are equipped with the skills to adapt to the dynamic business environment so that they can consistently supply managers with pertinent management accounting information.

10.3 Originality of Research

The standards by which a doctorate thesis is distinguished from other research report levels include originality and addition to knowledge (Corliss et al., 2015). This idea is crucial to a PhD thesis as, according to Phillips and Johnson (2022), "the PhD is awarded for an original contribution to knowledge." Having a completely new perspective on the field or the subject is not required, though. Phillips and Johnson (2022), state that it is adequate for students to make a little, gradual progress in their comprehension. Corliss et al. (2015) state that "the contribution need not be revolutionary, but the research must result in a contribution to our understanding of the phenomenon that has been investigated."

Many writers have given various definitions of originality (Francis, 1984; Flory, 1993; Howard 2007). There are several ways a PhD thesis might be innovative. Here are some of them.

1. Writing down a significant new piece of information for the first time.
2. Continuing an earlier effort that was original.
3. Completing unique tasks that the supervisor has designed.
4. Including one unique method, finding, or outcome in a competent but otherwise unoriginal research project.
5. Using creativity to test someone else's concept.

6. Performing previously unresearched empirical work.
7. Creating an original synthesis 8. Applying previously discovered information with a fresh perspective.
9. Testing an idea that was previously exclusive to other countries.
10. Adapting a certain method to a new field.
11. Applying recent findings to a historical problem.
12. Utilizing diverse approaches and working across disciplines.
13. Examining topics that practitioners in the field have not before examined.
14. Adding information in a previously unexplored manner.
15. Deserving of publishing in part.
16. Originality as demonstrated by the approach used or the subject matter examined.
17. Proof that an original study was conducted or that the concepts were tested.
18. Work and experimenting skills on one's own.
19. Comprehension of suitable methods and analysis.
20. The capacity to critically use sources and published work, some of the above-listed potential techniques will demonstrate the originality of this research.

10.3.1 Originality, as shown by the topic, researched or the methodology employed

This study looks at how management accounting practice affect financial performance using data from Bangladeshi-listed manufacturing companies. It attempts to look at how MAPs are now used in Bangladesh and how they relate to several contingency elements, including the size, age, and involvement of the organization's owners, as well as the usage of information technology and qualified accounting staff, all of which may have an impact on the financial performance of the organization. Furthermore, with rationalized managerial decisions acting as a mediating factor, this study also looks at how management accounting practice affects a firm's performance, particularly its financial performance. Two types of contingency fit have been used to construct and test hypotheses: the selection method and the interaction approach. There has never been any prior study done, particularly in Bangladesh that thoroughly examines the connections between MAP and contingency elements while using rationalized managerial decision-making's mediating role. As a result, the topic presents a reasonably tenable case for the uniqueness of this research.

10.3.2 Carrying out empirical work that has not been done before

In 2014, Collis and Hussey (2014) defined "primary data" as information gathered from an original source, such as focus groups, questionnaire surveys, interviews, or your own experiments. Being empirical in nature, the study uses surveys and interviews to gather primary data. Adapted and rearranged to gather data in answering research questions and testing hypotheses, the questionnaire contains some questions from earlier studies, but it also contains new ones. As no other study has used this particular questionnaire, particularly not in Bangladesh, this empirical research may be considered a unique work of research as it provides the most thorough survey and description of MAP in Bangladesh.

10.3.3 Ability to make critical use of published work and source materials

An example of how to critically use published articles and resources is provided by the discussion in Chapter 10 and the literature review in Chapter 3. The literature on contingency-based MA research is critically reviewed in Chapter 2. A summary and analysis of the research findings are provided in Chapter 10. The study findings are connected to the literature, demonstrating the critical utilization of existing work and source resources.

10.3.4 Being cross-disciplinary and using different methodologies

This study primarily focuses on management accounting (MA), although it also touches on the fields of finance and strategic management. These cross-disciplinary studies have not been used in Bangladeshi research prior to now.

10.3.5 An understanding of appropriate techniques

By using relevant methodologies, one may demonstrate the study's uniqueness. Statistical methods, such as factor analysis, multivariate regression analysis, mediation analysis, and structural equation model, together with a statistical software program (namely, SPSS, AMOS) are mostly utilized in this study. In the chapters prior to the studies conducted to evaluate the

hypotheses, these methodologies were explained. This shows how well-versed in various statistical methods the researcher is.

10.3.6 Worthy, in part, of publication

Two of the thesis's papers have been approved for the conferences. The conference proceedings have published them. Following the conference presentation, a journal editor expressed interest in publishing the article and made contact. These illustrate the thesis's "publishability."

10.4 Contributions of Research

There isn't much research available right now on management accounting practice in Bangladesh. The present study contributes to the existing literature on management accounting in South Asian nations, specifically Bangladesh. It provides an extensive overview and justification of MAP in Bangladesh, a rising market. This research's primary contributions are to look at how much MAP are currently used by Bangladeshi companies, what internal contingent factors affected how much MAP were used, and how important it is to investigate the relationships between MAP and other important constructs that improve organizational financial performance. Additionally, with rationalized managerial decisions acting as a mediating factor, the research looks at how management accounting methods affect a firm's performance, particularly its financial performance.

This study aims to close this research gap and contribute fresh empirical data to the body of knowledge on the use of MAP, therefore advancing our understanding of the recent advances of MAP in Bangladesh, especially in the context of developing countries. This study does not concentrate on a particular MAP or a small subset of MAP; rather, it examines a wide variety of MAP. The data will improve knowledge of the extent to which Bangladeshi manufacturing enterprises have utilized the MAP that are now accessible and if they have partially or fully embraced newly created approaches.

This research has also increased the state of knowledge by illuminating aspects impacting the adoption of MAP in manufacturing enterprises in a developing nation, all while building on the idea of contingency theory. The results show that organizational characteristics can have an impact on MAP. In order to improve knowledge of possible contingency variables that explain the usage of MAP, more contingency-based research in management accounting has been called for recently

(Abdelhalim, 2024; Rumman et al., 2024; Alsharari & Daniels, 2024). This type of study has addressed these calls. It adds to the corpus of research that examines the important correlations between important variables by utilizing the alignment idea within a contingency theory framework.

Additionally, this study has contributed by examining a potential link between better business performance and the usage of MAP. Therefore, the scope of MAP usage and the connection between MAP use and financial performance have been emphasized by this research. Furthermore, the study concludes that it is justified to use subjective measures of business performance to overcome the difficulties in obtaining objective data for financial and operational indicators and the disadvantages of using objective data in specific situations (since subjective and objective measures have a strong correlation).

Scholars, researchers, and industry professionals focus on how manufacturing firms handle MAP and how RMDs influence a firm's success. According to Yeshmin and Hossan (2011), they are essential in helping firms gain a competitive edge. The implementation of Risk Management Decisions (RMDs) aligns corporate goals and procedures with the external environment, enabling businesses to make consistent, appropriate decisions (Saukkonen et al., 2018). Continency theory was therefore employed in this study to explain the link between MAP and RMDs in order to enhance the performance of the organization. The association between the contextual factors and the various results was depicted by several studies (Bisbe et al., 2007; Chenhall & Moers, 2007; Yazdifar & Tsamenyi, 2005).

The goal of this research is to increase awareness among academics and industry professionals of the potential of using management accounting procedures in conjunction with judicious pairings of reasoning strategies to enhance business performance. Furthermore, anticipated are the research's conclusions, which should help scholars and professionals better understand the nature of management accounting procedures and improve the state of such practice in Bangladesh.

10.5 Implications for Future Research

1. The theoretical implications of this study focused on contingency theory and others supportive theories in that field. It a opportunity to explore those theories in practical sense and proposed policies.

2. In academic implications, our research relies on biased questionnaires and data from the perception, the structural equation model has been applied. This model also follows some supportive models; those are able to contribute to academic field. In future research, the researcher will follow this model and framework in their academic field.
3. Practical implications of this research work are added in valuable insight for manufacturing industries as well as other industries. Especially in emerging sectors, it has a great addition to operating a firm considering new knowledge and performance-based evidence.
4. The cross-sectional study shows the present situation of management accounting practice, indicating the necessity for a longitudinal survey to monitor changes in strategy adoption and industry performance over time.
5. Moreover, there are plans to conduct additional case studies within specific sectors to explore how certain techniques are implemented in organizations, including traditional and modern tools. This will enable drawing of specific case studies in a particular sector context to explain best practice methods and gain a better understanding of how tools can be utilized.
6. Information on the implementation of new tools, the challenges faced, strategies to overcome obstacles, and the resulting benefits could serve as valuable resources for management accountants.
7. Furthermore, upcoming research should investigate individual reasons why manufacturing firms are not implementing recently created management accounting tools. The question of what conditions are needed for effective implementation of new management accounting techniques arises due to the relatively modest benefits they provide. The results would improve a comparison across countries of management accounting practice and their influence on financial performance.
8. Further research is needed to explore the relationship between traditional and newly developed MAP. The reduced use of advanced MAP raises the issue of what conditions are needed to successfully introduce these methods in smaller companies. Once more, utilizing a qualitative case study method is expected to offer further insights that go beyond what can be obtained from a questionnaire survey method.

Further exploration in this field could involve comparing the adoption of MAP in Bangladesh with that in other developing nations to investigate variations in cultural and other related factors.

10.6 Limitations and Future Research

Due to financial and scheduling constraints, the researcher was unable to survey all 150 of the research participants, which are located across Bangladesh, even though the primary goal of the study was to determine the extent of MAP use in listed manufacturing companies (listed in DSE and CSE) and identify the factors influencing them. Alternatively, while selecting the research sample, the researcher used the most suitable selection methods, such as stratified random sampling. Despite being able to choose a sample that was most representative of the research community thanks to the sampling strategy chosen, the researcher advises conducting a survey of the entire study population (with multiple researchers) in order to do more studies in this area.

Only Bangladesh's large-scale public manufacturing businesses were the focus of the current study. In order to determine the extent to which manufacturing and non-manufacturing businesses of various sizes in Bangladesh employ MAP, more research can focus on the country's public and private sectors. The current study was cross-sectional-based empirical research applied during a restricted period due to time constraints. The current research may be replicated after a certain amount of time (say, five years) or fresh longitudinal MA research might be conducted to make use of future researchers from a longitudinal viewpoint. One kind of study that can pinpoint the reasons behind changes in the MAP implementation level over time is this kind of research.

The financial performance of the company is measured in this study using subjective metrics. The subjective assessment of the top management team was found to be consistent with the firm's actual performance because there is no conclusive evidence that these objective measures will yield more valid or reliable measurements (Abernethy & Guthrie, 1994). As a result, the study finds a positive correlation between subjective financial performance and objective financial performance, which is consistent with some previous research (e.g. Dess & Robinson, 1984; Dawes, 1999) Obtaining objective measurements or anchoring reactions against objective metrics may be the goals of future study.

Once more, the study employs a limited set of dependent factors. The simpler surroundings are reflected in this. It was also chosen to keep the number of variables minimal in order to prevent

complicating the response form or making respondents less likely to answer. That being said, the paper provides the most thorough overview and justification of MAP in Bangladesh.

References

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(9), 49-58.

Ahmad, K. (2012). *The use of management accounting practices in Malaysian SMEs*. University of Exeter (United Kingdom).

Abdi, M. B., & Mutswenje, V. S. (2023). Budgetary process and financial performance of manufacturing firms listed in the Nairobi Securities Exchange, Kenya. *International Academic Journal of Economics and Finance*, *3*(9), 288-308.

Alayli, S. (2023). The impact of capital budgeting practices on financial performance of lebanese banks. *The EUrASEANs: journal on global socio-economic dynamics*, (1 (38)), 29-39.

Alkndlee, A. M., Etemadi, H., khoda Rahmi, B., & Nayeri, D. (2023). Proposing a model for the effect of performance-based budgeting on the qualities of higher education in Iraq. *Periodicals of Engineering and Natural Sciences*, *11*(4), 144-159.

Akhter, F., Mustafa, H., Wai, L. Y., & Abdullah, A. (2025). Management Accounting Practices for Decision-Making of the Listed Manufacturing Organizations in Bangladesh. *Journal of Advanced Research in Business and Management Studies*, *39*(1), 1-18.

Abernethy, M. (1994). An empirical assessment of" fit" between strategy and management information system design. *Accounting and Finance*.

Anthony, R. N. (1989). Reminiscences about management accounting. *Journal of Management Accounting Research*, *1*(1), 1-20.

Abdel-Maksoud, A., Dugdale, D., & Luther, R. (2005). Non-financial performance measurement in manufacturing companies. *The British Accounting Review*, *37*(3), 261-297.

Anderson, S. W., & Lanen, W. N. (1999). Economic transition, strategy and the evolution of management accounting practices: the case of India. *Accounting, organizations and society*, *24*(5-6), 379-412.

Abdel-Kader, M., & Luther, R. (2006). Management accounting practices in the British food and drinks industry. *British food journal*.

Alebaishi, M. A. I. (1998). *Management accounting in the industrial sector of Saudi Arabia* (Doctoral dissertation, University of Wales. Cardiff).

Amara, T., & Benelifa, S. (2017). The impact of external and internal factors on the management accounting practices. *International Journal of Finance and Accounting*, *6*(2), 46-58.

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(9), 49-58.

Ahrens, T., & Chapman, C. S. (2007). Management accounting as practice. *Accounting, organizations and society*, *32*(1-2), 1-27.

Ahmad, K., & Zabri, S. M. (2016). The application of non-financial performance measurement in Malaysian manufacturing firms. *Procedia Economics and Finance*, *35*, 476-484.

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(9), 49-58.

Adu-Gyamfi, J., & Chipwere, K. Y. W. (2020). The impact of management accounting practices on the performance of manufacturing firms: An empirical evidence from Ghana. *Research Journal of Finance and Accounting*, *11*(20), 100-113.

Ahmad, K., & Mohamed Zabri, S. (2015). Factors explaining the use of management accounting practices in Malaysian medium-sized firms. *Journal of Small Business and Enterprise Development*, *22*(4), 762-781.

Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*, *40*(1), 2-27.

Ali, U. Y. A. R. (2010). Cost and management accounting practices: a survey of manufacturing companies. *Eurasian Journal of Business and Economics*, *3*(6), 113-125.

Albu, N., & Albu, C. N. (2012). Factors associated with the adoption and use of management accounting techniques in developing countries: The case of Romania. *Journal of International Financial Management & Accounting*, *23*(3), 245-276.

Ali, U. Y. A. R. (2010). Cost and management accounting practices: a survey of manufacturing companies. *Eurasian Journal of Business and Economics*, *3*(6), 113-125.

Alvarez, T., Sensini, L., Bello, C., & Vazquez, M. (2021). Management accounting practices and performance of SMEs in the Hotel industry: Evidence from an emerging economy. *International Journal of Business and Social Science*, *12*(2), 24-35.

Anderson, S. W., & Lanen, W. N. (1999). Economic transition, strategy and the evolution of management accounting practices: the case of India. *Accounting, organizations and society*, *24*(5-6), 379-412.

Angelakis, G., Theriou, N., & Floropoulos, I. (2010). Adoption and benefits of management accounting practices: Evidence from Greece and Finland. *Advances in accounting*, *26*(1), 87-96.

Azudin, A., & Mansor, N. (2018). Management accounting practices of SMEs: The impact of organizational DNA, business potential and operational technology. *Asia Pacific Management Review*, *23*(3), 222-226.

Ahmad, K. (2012). The use of management accounting practices in Malaysian SMEs.

Abba, M., Yahaya, L., & Suleiman, N. (2018). Explored and critique of contingency theory for management accounting research. *Journal of Accounting and Financial Management*, *4*(5).

Abd Wahab, K., Mhemed, Z., & Hashim, N. H. (2019, October). Information Communication Technology (ICT) Moderates the Relationship of Management Accounting Practices (MAP) and Firm Performance. In *e-PROCEEDINGS* (p. 325).

Ahmad, K., & Zabri, S. M. (2015). Factors explaining the use of management accounting practices in Malaysian medium-sized firms. *Journal of Small Business and Enterprise Development*.

Atidhira, A. T., & Yustina, A. I. (2017). The influence of return on asset, debt to equity ratio, earnings per share, and company size on share return in property and real estate companies. *JAAF (Journal of Applied Accounting and Finance)*, *1*(2), 128-146.

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(10).

Ackermann, F., Eden, C., & Williams, T. (1997). Modeling for litigation: Mixing qualitative and quantitative approaches. *Interfaces*, *27*(2), 48-65.

Al, S. F. A., & McLellan, J. D. (2011). Management Accounting Practices in Egypt--A Transitional Economy Country. *Journal of Accounting, Business & Management*, *18*(2).

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(10).

Ahmad, K. (2014). The adoption of management accounting practices in Malaysian small and medium-sized enterprises. *Asian Social Science*, *10*(2), 236.

Abdel-Kader, M., & Luther, R. (2006). Management accounting practices in the British food and drinks industry. *British food journal*.

Abugalia, M. (2011). *The influence of business environment on the effectiveness of management accounting practices: evidence from Libyan companies* (Doctoral dissertation, University of Huddersfield).

Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: application of "mixed" research approach. *Work study*.

Abdi, H. (2003). Multivariate analysis. *Encyclopedia for research methods for the social sciences. Thousand Oaks: Sage*, 699-702.

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(9), 49-58.

Ali, U. Y. A. R. (2010). Cost and management accounting practices: a survey of manufacturing companies. *Eurasian Journal of Business and Economics*, *3*(6), 113-125.

Al-Omiri, M. F. R. (2003). *The diffusion of management accounting innovations: a study of the factors influencing the adoption, implementation levels and success of ABC* (Doctoral dissertation, University of Huddersfield).

Agboola, A. A., & Salawu, M. K. (2012). The determinants of internet financial reporting: Empirical evidence from Nigeria. *Research Journal of Finance and Accounting*, *3*(11), 95-105.

Abdel-Maksoud, A. B. (2011). Management accounting practices and managerial techniques and practices in manufacturing firms: Egyptian evidence. *International Journal of Managerial and Financial Accounting*, *3*(3), 237-254.

Amoako, G. K. (2013). Accounting practices of SMEs: A case study of Kumasi Metropolis in Ghana. *International Journal of Business and Management*, *8*(24), 73.

Abdel-Kader, M., & Luther, R. (2006). Management accounting practices in the British food and drinks industry. *British food journal*. 108(5), 336-357.

Alnamri, M. (1993). *Management accounting in Saudi Arabia: a comparative analysis of Saudi and Western approaches* (Doctoral dissertation, Newcastle University).

Anderson, S. W. (2006). Managing costs and cost structure throughout the value chain: research on strategic cost management. *Handbooks of Management Accounting Research*, *2*, 481-506.

Alebaishi, M. A. I. (1998). *Management accounting in the industrial sector of Saudi Arabia* (Doctoral dissertation, University of Wales. Cardiff).

Adler, R., Everett, A. M., & Waldron, M. (2000, June). Advanced management accounting techniques in manufacturing: utilization, benefits, and barriers to implementation. In *Accounting Forum* (Vol. 24, No. 2, pp. 131-150). Taylor & Francis.

Anita Kusuma, D., Nurdiono, N., Agrianti, K., & Yuliansyah, Y. (2021). Effects of Strategic Performance Measurement System and Islamic Work Ethics on Firm Performance:(Evidence from Malaysian Islamic Banks). *Ilkogretim Online*, *20*(6), 781-796.

Ahmad, K. (2014). The adoption of management accounting practices in Malaysian small and medium-sized enterprises. *Asian Social Science*, *10*(2), 236.

Ahmad, N. S. M., & Leftesi, A. (2014). An exploratory study of the level of sophistication of management accounting practices in Libyan manufacturing companies. *International Journal of Business and Management*, *2*(2), 1.

Armstrong, P. (1991). Contradiction and social dynamics in the capitalist agency relationship. *Accounting, Organizations and Society*, *16*(1), 1-25.

Al-Htaybat, K., & von Alberti-Alhtaybat, L. (2013). Management accounting theory revisited: Seeking to increase research relevance. *International Journal of Business and Management*, *8*(18), 12.

Anand, M., Sahay, B. S., & Saha, S. (2005). Activity-Based Cost Management Practices in India: An Empirical Study. *Decision (0304-0941)*, *32*(1).

Alnamri, M. (1993). *Management accounting in Saudi Arabia: a comparative analysis of Saudi and Western approaches* (Doctoral dissertation, Newcastle University).

Ashfaq, K., Younas, S., Usman, M., & Hanif, Z. (2014). Traditional vs. contemporary management accounting practices and its role and usage across business life cycle stages: Evidence from Pakistani financial sector. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *4*(4), 104-125.

Adu-Gyamfi, J., & Chipwere, K. Y. W. (2020). The impact of management accounting practices on the performance of manufacturing firms: An empirical evidence from Ghana. *Research Journal of Finance and Accounting*, *11*(20), 100-113.

Adler, R., Everett, A. M., & Waldron, M. (2000, June). Advanced management accounting techniques in manufacturing: utilization, benefits, and barriers to implementation. In *Accounting Forum* (Vol. 24, No. 2, pp. 131-150). Taylor & Francis.

Ahmad, K. (2017). The implementation of management accounting practices and its relationship with performance in small and medium enterprises. *International Review of Management and Marketing*, *7*(1), 342-353.

Alnamri, M. (1993). *Management accounting in Saudi Arabia: a comparative analysis of Saudi and Western approaches* (Doctoral dissertation, Newcastle University).

Ahmad, K., & Mohamed Zabri, S. (2015). Factors explaining the use of management accounting practices in Malaysian medium-sized firms. *Journal of Small Business and Enterprise Development*, *22*(4), 762-781.

Asechemie, D. P. S., & Ikeri, J. O. (1999). Cost accounting among Nigerian artisans. *Research in Accounting in Emerging Economies*, *4*(Special Supplement 1), 233-253.

Abdel-Maksoud, A., Abdallah, W., & Youssef, M. (2012). An empirical study of the influence of intensity of competition on the deployment of contemporary management accounting practices and managerial techniques in Egyptian firms. *Journal of economic and Administrative Sciences*.

Abernethy, M. A., Lillis, A. M., Brownell, P., & Carter, P. (2001). Product diversity and costing system design choice: field study evidence. *Management Accounting Research*, *12*(3), 261-279.

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(9), 49-58.

Ayvaz, E., & Pehlivanli, D. (2011). The use of time driven activity based costing and analytic hierarchy process method in the balanced scorecard implementation. *International Journal of Business and Management*, *6*(3), 146.

Al Shamsi, I. R. H., & Alsinani, S. (2018). A study of organizational factors and employee retention: The case of ministry of civil service in Oman. *Journal of Accounting, Business and Finance Research*, *3*(2), 75-82.

Alleyne, P., & Weekes-Marshall, D. (2011). An exploratory study of management accounting practices in manufacturing companies in Barbados. *International Journal of Business and Social Science*, *2*(9), 49-58.

Ahmad, K., & Mohamed Zabri, S. (2015). Factors explaining the use of management accounting practices in Malaysian medium-sized firms. *Journal of Small Business and Enterprise Development*, *22*(4), 762-781.

Albu, N., & Albu, C. N. (2012). Factors associated with the adoption and use of management accounting techniques in developing countries: The case of Romania. *Journal of International Financial Management & Accounting*, *23*(3), 245-276.

Abdelhalim, A. M. (2024). How management accounting practices integrate with big data analytics and its impact on corporate sustainability. *Journal of Financial Reporting and Accounting*, *22*(2), 416-432.

Bisbe, J., Batista-Foguet, J. M., & Chenhall, R. (2007). Defining management accounting constructs: A methodological note on the risks of conceptual misspecification. *Accounting, organizations and society*, *32*(7-8), 789-820.

Berwouts, S., Gordon, J. T., Rundell, C. A., Barton, D. E., & Dequeker, E. (2008). Evaluation and use of a synthetic quality control material, included in the European external quality assessment scheme for cystic fibrosis. *Human mutation*, *29*(8), 1063-1070.

Baiman, S. (1990). Agency research in managerial accounting: A second look. *Accounting, organizations and society*, *15*(4), 341-371.

Bruggeman, W., & Slagmulder, R. (1995). The impact of technological change on management accounting. *Management Accounting Research*, *6*(3), 241-252.

Bjørnenak, T. (1997). Diffusion and accounting: the case of ABC in Norway. *Management accounting research*, *8*(1), 3-17.

Bhimani, A. (2012). Management accounting system implementation success: is reporting useful information sufficient?. *International Journal of Accounting, Auditing and Performance Evaluation*, *8*(2), 115-136.

Bhimani, A., & Bromwich, M. (2009). *Management Accounting: retrospect and prospect*. Elsevier.

Bromwich, M. (1990). The case for strategic management accounting: the role of accounting information for strategy in competitive markets. *Accounting, organizations and society*, *15*(1-2), 27-46.

Bhimani, A., & Willcocks, L. (2014). Digitisation,'Big Data'and the transformation of accounting information. *Accounting and business research*, *44*(4), 469-490.

Bjørnenak, T. (1997). Diffusion and accounting: the case of ABC in Norway. *Management accounting research*, *8*(1), 3-17.

Boyns, T. (1998). Budgets and budgetary control in British businesses to c. 1945. *Accounting, Business & Financial History*, *8*(3), 261-301.

Baines, A., & Langfield-Smith, K. (2003). Antecedents to management accounting change: a structural equation approach. *Accounting, organizations and society*, *28*(7-8), 675-698.

Bryant, S. M., Hunton, J. E., & Stone, D. N. (2004). Internet-based experiments: Prospects and possibilities for behavioral accounting research. *Behavioral Research in Accounting*, *16*(1), 107-129.

Blumentritt, T., & Danis, W. M. (2006). Business strategy types and innovative practices. *Journal of Managerial Issues*, 274-291.

Bux, C., & Amicarelli, V. (2022). Material flow cost accounting (MFCA) to enhance environmental entrepreneurship in the meat sector: Challenges and opportunities. *Journal of Environmental Management*, *313*, 115001.

Baldvinsdottir, G., Mitchell, F., & Nørreklit, H. (2010). Issues in the relationship between theory and practice in management accounting. *Management Accounting Research*, *21*(2), 79-82.

Bromwich, M., & Scapens, R. W. (2016). Management accounting research: 25 years on. *Management Accounting Research*, *31*, 1-9.

Bangara, S. N. (2017). Contextual factors influencing management accounting practices adopted by large manufacturing companies in Kenya. *Res. J. Financ. Account*, *23*, 7-19.

Busco, C., Quattrone, P., & Riccaboni, A. (2007). Management accounting: issues in interpreting its nature and change. *Management Accounting Research*, *18*(2), 125-149.

Bruns, W. J., & Waterhouse, J. H. (1975). Budgetary control and organization structure. *Journal of accounting research*, 177-203.

Baldvinsdottir, G., Mitchell, F., & Nørreklit, H. (2010). Issues in the relationship between theory and practice in management accounting. *Management Accounting Research*, *21*(2), 79-82.

Blough, C. G. (1947). Comments on accounting procedures: Capital stock and earned surplus in financial statements. *Journal of Accountancy (pre-1986)*, *83*(000004), 327.Garner, S. P. (1947). Historical development of cost accounting. *The Accounting Review*, *22*(4), 385-389.

Bartlett, M. S. (1947). Multivariate analysis. *Supplement to the journal of the royal statistical society*, *9*(2), 176-197.

Burrell, G., & Morgan, G. (2017). *Sociological paradigms and organisational analysis: Elements of the sociology of corporate life*. Routledge.

Battilana, J., & Casciaro, T. (2012). Change agents, networks, and institutions: A contingency theory of organizational change. *Academy of Management Journal*, *55*(2), 381-398.

Baldvinsdottir, G., Mitchell, F., & Nørreklit, H. (2010). Issues in the relationship between theory and practice in management accounting. *Management Accounting Research*, *21*(2), 79-82.

Busco, C., Riccaboni, A., & Scapens, RW (2006). Trust for accounting and accounting for trust. *Management Accounting Research* , *17* (1), 11-41.

Baxter, J., & Chua, W. F. (2003). Alternative management accounting research—whence and whither. *Accounting, organizations and society*, *28*(2-3), 97-126.

Baxter, J., & Chua, W. F. (2006). A management accountant from “down-under”: The research of Professor Bill Birkett (1940–2004). *Management Accounting Research*, *17*(1), 1-10.

Baker, C. R., & Bettner, M. S. (1997). Interpretive and critical research in accounting: a commentary on its absence from mainstream accounting research. *Critical perspectives on Accounting*, *8*(4), 293-310.

Baya, O. P. (2023). Budgeting, Risk Planning, Internal Control and Financial Performance of Kenyan Manufacturing Firms. *African Journal of Commercial Studies*, *3*(3), 181-190.

Böer, G. B. (2000). Management accounting education: Yesterday, today, and tomorrow. *Issues in Accounting Education*, *15*(2), 313-334.

Bouquin, H. (2004). *Management accounting* (p. 359). Economica.

Balbi, S., & Triunfo, N. (2012). Statistical tools in the joint analysis of closed and open-ended questions. In *Survey data collection and integration* (pp. 61-72). Berlin, Heidelberg: Springer Berlin Heidelberg.

Brown, J. D. (2009). Principal components analysis and exploratory factor analysis &ndash Definitions, differences, and choices. *Statistics*, *13*(1), 26-30.

Breuer, A., Frumusanu, M. L., & Manciu, A. (2013). The role of management accounting in the decision making process: Case study Caras Severin county. *Annales Universitatis Apulensis: Series Oeconomica*, *15*(2), 355.

Björkman, I., & Budhwar, P. (2007). When in Rome…? Human resource management and the performance of foreign firms operating in India. *Employee Relations*, *29*(6), 595-610.

Boselie, P., & Paauwe, J. (2005). Human resource function competencies in European companies. *Personnel review*, *34*(5), 550-566.

Chand, M., & Dahiya, A. (2010). Application of management accounting techniques in Indian small and medium hospitality enterprises: An empirical study. *International Journal of Entrepreneurship and Small Business*, *11*(1), 25-41.

Chenhall, R. H., & Moers, F. (2007). The issue of endogeneity within theory-based, quantitative management accounting research. *European Accounting Review*, *16*(1), 173-196.

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, organizations and society*, *33*(7-8), 836-863.

Chowdhury, M. S. A., Islam, M. A., Islam, M. S., Kabir, M. J., Islam, M., Arafat, A. B. M. Y., & Hoque, S. (2024). Evaluation of the contribution of the automated accounting information system to the managerial decision-making process in the commercial bank of Bangladesh. *International Journal of Applied Economics, Finance and Accounting*, *18*(3), 490-506.

Chowdhury, N. M., & Daniels, B. (2024). Management accounting practices and organizational change aspects in the public sector: contextual/processual approach. *Journal of Accounting & Organizational Change*, *20*(1), 177-204.

Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, organizations and society*, *28*(2-3), 127-168.

Chua, W. F. (1986). Radical developments in accounting thought. *Accounting review*, 601-632.

Cardo I. R., Pete, S. (2011). Managerial and cost accounting practices - a Romanian overview, http://anale,steconomiceuoradea.ro/volurne /2011 /n2/067.pdf

Căpuşneanu, S., & Briciu, S. (2011). Control and analysis of costs based on results account of the ABC method. *International Journal of Academic Research in Business and Social Sciences*, *1*(3), 146-147.

Collis, J., & Hussey, R. (2014). Writing up the Research. In *Business Research* (pp. 297-330). Palgrave, London.

Corliss, M., Lewis, P., & Daly, A. (2015). What's Happened to the Rate of Return to Business Masters?. *Economic Papers: A journal of applied economics and policy*, *34*(1-2), 48-59.

Chenhall, R. H., & Moers, F. (2007). The issue of endogeneity within theory-based, quantitative management accounting research. *European Accounting Review*, *16*(1), 173-196.

Campos, F., Lima Santos, L., Gomes, C., & Cardoso, L. (2022). Management Accounting Practices in the Hospitality Industry: A Systematic Review and Critical Approach. *Tourism and Hospitality*, *3*(1), 243-264.

Chenhall, R. H., & Langfield-Smith, K. (1998). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. *Accounting, organizations and society*, *23*(3), 243-264.

Cuzdriorean, D. D. (2017). The use of management accounting practices by Romanian small and medium-sized enterprises: A field study. *Accounting and Management Information Systems*, *16*(2), 291-312.

Cleary, P., Quinn, M., Rikhardsson, P., & Batt, C. (2022). Exploring the links between IT tools, Management accounting practices and SME performance: perceptions of CFOs in Ireland. *Accounting, Finance & Governance Review*, 35440.

Chenhall, R. H., & Langfield-Smith, K. (1998). Adoption and benefits of management accounting practices: an Australian study. *Management accounting research*, *9*(1), 1-19.

Campbell, D. T., & Riecken, H. W. (1968). Quasi-experimental design. *International encyclopedia of the social sciences*, *5*(3), 259-263.

Cadbury, S. A. (2000). The corporate governance agenda. *Corporate Governance: An International Review*, *8*(1), 7-15.

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, organizations and society*, *33*(7-8), 836-863.

Chenhall, R. H., & Langfield-Smith, K. (1998). Adoption and benefits of management accounting practices: an Australian study. *Management accounting research*, *9*(1), 1-19.

Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, organizations and society*, *28*(2-3), 127-168.

Cokins, G. (2001). A management accounting framework. *Journal of Corporate Accounting & Finance*, *13*(1), 73-82.

Chandar, N., Collier, D., & Miranti, P. (2012). Graph standardization and management accounting at AT&T during the 1920s. *Accounting History*, *17*(1), 35-62.

Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, organizations and society*, *28*(2-3), 127-168.

Chalmers, K., & Wright, S. (2011). Bridging accounting research and practice: A value adding endeavour. *Bridging the gap between academic accounting research and professional practice*, 59.

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, organizations and society*, *33*(7-8), 836-863.

Chapman, C. S., & Kern, A. (2012). What do academics do? Understanding the practical relevance of research. *Qualitative Research in Accounting & Management*, *9*(3).

Chalmers, K., & Wright, S. (2011). Bridging accounting research and practice: A value adding endeavour. *Bridging the gap between academic accounting research and professional practice*, 59.

Caplan, D. (2006). Management Accounting Concepts and Techniques. University. *Albany State University of New York*.

Caplan, D., Janvrin, D., & Kurtenbach, J. (2007). Internal audit outsourcing: an analysis of self-regulation by the accounting profession. *Research in Accounting Regulation*, *19*, 3-34.

Chenhall, R. H., & Morris, D. (1986). The impact of structure, environment, and interdependence on the perceived usefulness of management accounting systems. *Accounting Review*, 16-35.

Dess, G. G., & Robinson Jr, R. B. (1984). Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. *Strategic management journal*, *5*(3), 265-273.

Dawes, J. (1999). The relationship between subjective and objective company performance measures in market orientation research: further empirical evidence. *Marketing bulletin-department of marketing massey university*, *10*, 65-75.

Dafouz, E., & Camacho-Miñano, M. M. (2016). Exploring the impact of English-medium instruction on university student academic achievement: The case of accounting. *English for Specific Purposes*, *44*, 57-67.

Dropulić, I. (2013). The effect of contingency factors on management control systems: a study of manufacturing companies in Croatia. *Economic research-Ekonomska istraživanja*, (1), 369-382.

Donnelly, R., & Lynch, C. (2002). The ownership structure of UK firms and the informativeness of accounting earnings. *Accounting and Business Research*, *32*(4), 245-257.

Daft, R. L., & Macintosh, N. B. (1984). The nature and use of formal control systems for management control and strategy implementation. *Journal of management*, *10*(1), 43-66.

Dugdale, D. (2005). *Contemporary management accounting practices in UK manufacturing*. Elsevier.

Drury, C. (2012). Management and Cost Accounting, Eight edition. *Cengage Learning. United Kingdom*.

Dlamini, B. (2020). Insight on the use of management accounting practices among large manufacturing entities in Zimbabwe: A Case study of Bulawayo Metropolitan Province. *International Journal of Advanced Research and Publications*, *4*(2), 32-37.

Davis, S., & Albright, T. (2004). An investigation of the effect of balanced scorecard implementation on financial performance. *Management accounting research*, *15*(2), 135-153.

Denscombe, M. (2008). Communities of practice: A research paradigm for the mixed methods approach. *Journal of mixed methods research*, *2*(3), 270-283.

Drury, C., & Tayles, M. (1995). Issues arising from surveys of management accounting practice. *Management Accounting Research*, *6*(3), 267-280.

Dasanayaka, C. H., Murphy, D. F., Nagirikandalage, P., & Abeykoon, C. (2021). The application of management accounting practices towards the sustainable development of family businesses: A critical review. *Cleaner Environmental Systems*, *3*, 100064.

Drury, C. M. (2013). *Management and cost accounting*. Springer.

De Wet, J. H. V. H., & Du Toit, E. (2007). Return on equity: A popular, but flawed measure of corporate financial performance. *South African Journal of Business Management*, *38*(1), 59-69.

DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, *40*(4), 314-321.

Dianati Deilami, Z., Alam Beigi, A., & Khatibi, H. (2016). Investigation of the Influence of Environmental Uncertainty on the Effectiveness of Management Accounting Practices. *Journal of Management Accounting and Auditing Knowledge*, *5*(17), 87-98.

Drury, C., & Tayles, M. (1995). Issues arising from surveys of management accounting practice. *Management Accounting Research*, *6*(3), 267-280.

Dumitru, V., Ionescu, I., Calu, A., & Oancea, M. (2011). An investigation regarding the disclosure of corporate social responsibility information for listed companies from Romania. *Amfiteatru Economic Journal*, *13*(29), 146-161.

Dahal, R. K., Bhattarai, G., & Karki, D. (2020). Management accounting practices on organizational performance mediated by rationalized managerial decisions. *The International Research Journal of Management Science*, *5*(1), 148-167.

Draper, N. R., & Smith, H. (1998). *Applied regression analysis* (Vol. 326). John Wiley & Sons.

Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Perspectives*, *19*(1), 147-156.

Endri, E. (2020). The Factors Influencing Earnings Management and Implications for the Cost of Equity Capital. *International Journal of Innovation, Creativity and Change, www. ijicc. net*, *13*(8).

Edwards, J. R., & Newell, E. (1991). The development of industrial cost and management accounting before 1850: a survey of the evidence. *Business History*, *33*(1), 35-57.

El-Ebaishi, M., Karbhari, Y., & Naser, K. (2003). Empirical evidence on the use of management accounting techniques in a sample of Saudi manufacturing companies. *International Journal of Commerce and Management*, *13*(2), 74-101.

Edwards, J. R., & Newell, E. (1991). The development of industrial cost and management accounting before 1850: a survey of the evidence. *Business History*, *33*(1), 35-57.

Emmanuel, C. R., & Otley, D. T. (1992). The usefulness of residual income. *Readings in Accounting for Management Control*, 371-378.

Firth, M. (1996). The diffusion of managerial accounting procedures in the People's Republic of China and the influence of foreign partnered joint ventures. *Accounting, Organizations and Society*, *21*(7-8), 629-654.

Fruitticher, L., Stroud, N., Laster, J., & Yakhou, M. (2005). Budget practices case studies. *Managerial Auditing Journal*, *20*(2), 171-178.

Franco-Santos, M., Lucianetti, L., & Bourne, M. (2012). Contemporary performance measurement systems: A review of their consequences and a framework for research. *Management accounting research*, *23*(2), 79-119.

Fleischman, R. K., & Tyson, T. N. (1993). Cost accounting during the industrial revolution: The present state of historical knowledge. *Economic History Review*, 503-517.

Foster, G., & Gupta, M. (1994). Marketing, cost management and management accounting. *Journal of Management Accounting Research*, *6*, 43.

Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management accounting research*, *20*(4), 263-282.

Fakir, A. A., Islam, M. S., & Ahammed, A. (2022). Factors Affecting The Choice Of A Career As Professional Accountants: Perspective Of Accounting Graduates. *Journal of Business Studies*, 121.

Francis, J. R. (1984). The effect of audit firm size on audit prices: A study of the Australian market. *Journal of accounting and economics*, *6*(2), 133-151.

Flory, S. M., Phillips, T. J., Reidenbach, R. E., & Robin, D. P. (1993). A Reply to" A Comment on'A Multidimensional Analysis of Selected Ethical Issues in Accounting'". *The Accounting Review*, *68*(2), 417-421.

Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian & New Zealand Journal of Psychiatry*, *36*(6), 717-732.

Flury, B. K., & Riedwyl, H. (1986). Standard distance in univariate and multivariate analysis. *The American Statistician*, *40*(3), 249-251.

Fisher, J. (1995). Contingency-based research on management control systems: categorization by level of complexity. *Journal of accounting literature*, *14*, 24.

Gordon, L. A., & Narayanan, V. K. (1984). Management accounting systems, perceived environmental uncertainty and organization structure: an empirical investigation. *Accounting, organizations and society*, *9*(1), 33-47.

Green, F. B., & Amenkhienan, F. E. (1992). Accounting innovations: a cross sectional survey of manufacturing firms. *Journal of Cost Management for the Manufacturing Industry*, *6*(1), 58-64.

Galbreath, J., & Galvin, P. (2008). Firm factors, industry structure and performance variation: New empirical evidence to a classic debate. *Journal of business research*, *61*(2), 109-117.

Gatti, M. (2018). The impact of management accounting research: an analysis of the past and a look at the future. *International Journal of Business and Management*, *13*(5), 47-60.

Groot, T., & Lukka, K. (2000). *Cases in management accounting: Current practices in European companies* (Doctoral dissertation, Univerza v Mariboru, Ekonomsko-poslovna fakulteta).

Gratton, C., & Jones, I. (2010). *Research methods for sports studies*. Routledge.

Gichaaga, P. M. (2014). *Effects of management accounting practices on financial performance of manufacturing companies in Kenya* (Doctoral dissertation, University of Nairobi).

Guilding, C., Cravens, K. S., & Tayles, M. (2000). An international comparison of strategic management accounting practices. *Management Accounting Research*, *11*(1), 113-135.

Grötsch, V. M., Blome, C., & Schleper, M. C. (2013). Antecedents of proactive supply chain risk management–a contingency theory perspective. *International Journal of Production Research*, *51*(10), 2842-2867.

Gichaaga, P. M. (2014). *Effects of management accounting practices on financial performance of manufacturing companies in Kenya* (Doctoral dissertation, University of Nairobi).

Gliaubicas, D. (2012). The research of management accounting evolution in the context of economic changes. *Economics and management*, *17*(1), 22-29.

Gordon, L. A., & Silvester, K. J. (1999). Stock market reactions to activity-based costing adoptions. *Journal of Accounting and Public Policy*, *18*(3), 229-251.

Gliaubicas, D., & Kanapickienė, R. (2015). Contingencies impact on strategic cost management usage in Lithuanian companies. *Procedia-Social and Behavioral Sciences*, *213*, 254-260.

Gerdin, J., & Greve, J. (2004). Forms of contingency fit in management accounting research—a critical review. *Accounting, organizations and society*, *29*(3-4), 303-326.

Gichaaga, P. M. (2014). *Effects of management accounting practices on financial performance of manufacturing companies in Kenya* (Doctoral dissertation, University of Nairobi).

Ghosh, B. C., & Chan, Y. K. (1997). Management accounting in Singapore-well in place?. *Managerial Auditing Journal*, *12*(1), 16-18.

Greenberg, R. K., & Wilner, N. A. (2015). Using concept maps to provide an integrative framework for teaching the cost or managerial accounting course. *Journal of Accounting Education*, *33*(1), 16-35.

Garg, M. C., & Divya. (2009). Accounting standard disclosure compliance in online reporting by Indian companies. *Asia Pacific Business Review*, *5*(2), 141-153.

Guilding, C., Cravens, K. S., & Tayles, M. (2000). An international comparison of strategic management accounting practices. *Management accounting research*, *11*(1), 113-135.

Gyamera, E., Abayaawien Atuilik, W., Eklemet, I., Henry Matey, A., Tetteh, L. A., & Kwasi Apreku-Djan, P. (2023). An analysis of the effects of management accounting services on the financial performance of SME: The moderating role of information technology. *Cogent Business & Management*, *10*(1), 2183559.

Gnawali, A. (2017). Management accounting systems and organizational performance of Nepalese commercial banks. *The journal of Nepalese business studies*, *10*(1), 8-19.

Govindarajan, V. (1984). Appropriateness of accounting data in performance evaluation: an empirical examination of environmental uncertainty as an intervening variable. *Accounting, organizations and society*, *9*(2), 125-135.

Govindarajan, V. (1988). A contingency approach to strategy implementation at the business-unit level: integrating administrative mechanisms with strategy. *Academy of management Journal*, *31*(4), 828-853.

Hayes, R. H., & Abernathy, W. J. (1980). Managing our way to economic decline.

Horngren, C. T. (2009). *Cost accounting: a managerial emphasis*. Pearson Education India.

Horngren, C. T. (1995). Management accounting: this century and beyond. *Management Accounting Research*, *6*(3), 281-286.

Hyvönen, T. (2013). ICT systems and cost management. In *The Routledge Companion to Cost Management* (pp. 68-82). Routledge.

Halpern, J. W. (1988). Getting in deep: Using qualitative research in business and technical communication. *Iowa State Journal of Business and Technical Communication*, *2*(2), 22-43.

Hajiha, Z., & Sarkhani Ganji, H. R. (2020). Investigating the role of management accounting mediation on the relationship between cost system design and company performance. *Management accounting*, *13*(44), 41-53.

Hancock, B., Ockleford, E., & Windridge, K. (2001). *An introduction to qualitative research*. London: Trent focus group.

Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. *Education+ Training*.

Hickey, G., & Kipping, C. (1996). A multi-stage approach to the coding of data from open-ended questions. *Nurse researcher*, *4*(1), 81-91.

Heryanto, G., & Sudibyo, Y. (2017). The influence of organizational culture on corporate performance: Using management accounting system as the mediating variable. *OIDA International Journal of Sustainable Development*, *10*(01), 35-48.

Hadid, W., & Al-Sayed, M. (2021). Management accountants and strategic management accounting: The role of organizational culture and information systems. *Management Accounting Research*, *50*, 100725.

Hutaibat, K. A. (2005). *Management accounting practices in Jordan: A contingency approach* (Doctoral dissertation, University of Bristol).

Hendricks, J. A. (1988). Applying cost accounting to factory automation. *Strategic Finance*, *70*(6), 24.

Howard, M. (2007). *Accounting and Business Valuation Methods: how to interpret IFRS accounts*. Elsevier.

HassabElnaby, H. R., Epps, R. W., & Said, A. A. (2003). The impact of environmental factors on accounting development: an Egyptian longitudinal study. *Critical Perspectives on Accounting*, *14*(3), 273-292.

Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). Practice developments in budgeting: an overview and research perspective. *Journal of management accounting research*, *15*(1), 95-116.

Hansen, S. C., & Van der Stede, W. A. (2004). Multiple facets of budgeting: an exploratory analysis. *Management accounting research*, *15*(4), 415-439.

Hilton, D. J. (2001). The psychology of financial decision-making: Applications to trading, dealing, and investment analysis. *The Journal of Psychology and Financial Markets*, *2*(1), 37-53.

Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: impact on organizational performance. *Journal of management accounting research*, *12*(1), 1-17.

Harris, J., & Durden, C. (2012). Management accounting research: an analysis of recent themes and directions for the future. *Journal of Applied Management Accounting Research*, *10*(2), 21.

Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: impact on organizational performance. *Journal of management accounting research*, *12*(1), 1-17.

Haldma, T., & Lääts, K. (2002). Contingencies influencing the management accounting practices of Estonian manufacturing companies. *Management accounting research*, *13*(4), 379-400.

Hoyle, R. H. (Ed.). (1995). *Structural equation modeling: Concepts, issues, and applications*. Sage.

Hamdan, M. (2013). *Costing Systems and Management Accounting Practices in Syrian Private Industrial Companies: A Contingency Approach* (Doctoral dissertation, University of Glamorgan).

Horngren, C. T., Bhimani, A., Datar, S. M., & Foster, G. (2002). *Management and cost accounting*. Harlow: Financial Times/Prentice Hall.

Hopwood, A. G. (2008). Management accounting research in a changing world. *Journal of Management Accounting Research*, *20*, 3.

Hermes, N., Postma, T. J., & Zivkov, O. (2006). Corporate governance codes in the European Union: Are they driven by external or domestic forces?. *International Journal of Managerial Finance*, *2*(4), 280-301.

Hilton, R. W., & Platt, D. DE (2011). Managerial Accounting: Creating Value in a Global Business Environment.

Hoskin, K. W., & Macve, R. H. (1988). The genesis of accountability: the West Point connections. *Accounting, Organizations and Society*, *13*(1), 37-73.

Hoque, Z., & Moll, J. (2001). Public sector reform–Implications for accounting, accountability and performance of state-owned entities–an Australian perspective. *International Journal of Public Sector Management*, *14*(4), 304-326.

Hansen, S. C., & Van der Stede, W. A. (2004). Multiple facets of budgeting: an exploratory analysis. *Management accounting research*, *15*(4), 415-439.

Hansen, D. R., & Mowen, M. M. (2007). *Managerial accounting*. South-Western.

Hutaibat, K. A. (2005). *Management accounting practices in Jordan: A contingency approach* (Doctoral dissertation, University of Bristol).

Hariyati, H., Nuswantara, D. A., Hidayat, R. A., & Putikadea, I. (2023). Management accounting information system and intellectual capital: a way to increase SME's business performance. *Jurnal Siasat Bisnis*, 61-75.

Hopper, T., Otley, D., & Scapens, B. (2001). British management accounting research: whence and whither: opinions and recollections. *The British Accounting Review*, *33*(3), 263-291.

Hofstede, G. (1983). Cultural dimensions for project management. *International Journal of Project Management*, *1*(1), 41-48.

Hopper, T., & Armstrong, P. (1991). Cost accounting, controlling labour and the rise of conglomerates. *Accounting, organizations and society*, *16*(5-6), 405-438.

Hopper, T., & Powell, A. (1985). Making sense of research into the organizational and social aspects of management accounting: a review of its underlying assumptions. *Journal of management Studies*, *22*(5), 429-465.

Horngren, C. T., Datar, S. M., Foster, G., Rajan, M. V., & Ittner, C. (2009). *Cost accounting: a managerial emphasis*. Pearson Education India. 108(5), 336-357.

Horngren, C. T. (1995). Management accounting: this century and beyond. *Management Accounting Research*, *6*(3), 281-286.

Horngren, C. T., Datar, S. M., Foster, G., Rajan, M. V., & Ittner, C. (2009). *Cost accounting: a managerial emphasis*. Pearson Education India.

Hamdan, M. (2013). *Costing Systems and Management Accounting Practices in Syrian Private Industrial Companies: A Contingency Approach* (Doctoral dissertation, University of Glamorgan).

Iyibildiren, M., & Karasioğlu, F. (2017). Effect of management accounting practices and performance measurement on the perception of business performance: Field study on organized industrial zone of Konya. *Journal of Knowledge Management, Economics and Information Technology*, *7*(4), 1-14.

Ivis, F. J., Bondy, S. J., & Adlaf, E. M. (1997). The effect of question structure on self-reports of heavy drinking: closed-ended versus open-ended questions. *Journal of studies on alcohol*, *58*(6), 622-624.

Ismail, T. H., & Mahmoud, N. (2012). The influence of organizational and environmental factors on cost systems design in Egypt. *British Journal of Economics, Finance and Management Sciences*, *4*(2), 31-51.

Ittner, C. D., & Larcker, D. F. (1998). Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. *Journal of accounting research*, *36*, 1-35.

Islam, J., & Hu, H. (2012). A review of literature on contingency theory in managerial accounting. *African journal of business management*, *6*(15), 5159.

Ibrahim, M. S., & Abdullah, M. (2007). An overview of forensic accounting in Malaysia.

Ittner, C., & Larcker, D. (2002). Empirical managerial accounting research: are we just describing management consulting practice?. *European Accounting Review*, *11*(4), 787-794.

Imtiaz Mazumder, M., & Ahmad, N. (2010). Greed, financial innovation or laxity of regulation? A close look into the 2007-2009 financial crisis and stock market volatility. *Studies in Economics and Finance*, *27*(2), 110-134.

Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, organizations and society*, *28*(7-8), 715-741.

Inanga, E. L., & Schneider, W. B. (2005). Accounting Research And Accounting Practice: An Uneasy Relationship. *Journal of Management and Social Sciences*, *1*(2), 127-148.

Ittner, C., & Larcker, D. (2002). Empirical managerial accounting research: are we just describing management consulting practice?. *European Accounting Review*, *11*(4), 787-794.

Islam, M., & Kantor, J. (2005). The development of quality management accounting practices in China. *Managerial Auditing Journal*.

Isa, C. R., & Thye, N. K. (2006). Advanced management accounting techniques: an exploratory study on Malaysian manufacturing firms. *Proceeding of the International Business and Information*.

Islam, J., & Hu, H. (2012). A review of literature on contingency theory in managerial accounting. *African journal of business management*, *6*(15), 5159.

Jönsson, S. (1998). Relate management accounting research to managerial work!. *Accounting, Organizations and Society*, *23*(4), 411-434.

Joshi, P. L., Bremser, W. G., & Al-Ajmi, J. (2008). Perceptions of accounting professionals in the adoption and implementation of a single set of global accounting standards: Evidence from Bahrain. *Advances in Accounting*, *24*(1), 41-48.

Johnson, H. T., & Kaplan, R. S. (1987). The rise and fall of management accounting [2]. *Strategic Finance*, *68*(7), 22.

J Jusoh, R., & Parnell, J. A. (2008). Competitive strategy and performance measurement in the Malaysian context: An exploratory study. *Management decision*. 46 (1), 5-31

Johnson, H. T. (1981). Toward a new understanding of nineteenth-century cost accounting. *Accounting Review*, 510-518.

Johnson, H. T., & Kaplan, R. S. (1987). The rise and fall of management accounting [2]. *Strategic Finance*, *68*(7), 22.

Johan, R., & Rahmawati, A. (2023). The Effect of Performance-Based Budgeting, Regional Financial Management and Quality of Human Resources on SKPD Performance with Regional Financial Supervision as a Moderating Variable. *Cakrawala Repositori IMWI*, *6*(3), 187-197.

Jariya, Achchi Mohamed Inun, and Athambawa Haleem (2021). "MANAGEMENT ACCOUNTING PRACTICES'ADOPTION AMONG LISTED MANUFACTURING COMPANIES IN SRI LANKA." *Academy of Entrepreneurship Journal* 27, no. 6 (2021): 1-15.

Johnson, P., & Gill, J. (2010). Research methods for managers. *Research Methods for Managers*, 1-288.

Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative science quarterly*, *24*(4), 602-611.

Jones, I. (1997). Mixing qualitative and quantitative methods in sports fan research. *The qualitative report*, *3*(4), 1-8.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of mixed methods research*, *1*(2), 112-133.

Jones, T. C., & Dugdale, D. (2002). The ABC bandwagon and the juggernaut of modernity. *Accounting, organizations and society*, *27*(1-2), 121-163.

Johnson, P., Buehring, A., Cassell, C., & Symon, G. (2006). Evaluating qualitative management research: Towards a contingent criteriology. *International Journal of Management Reviews*, *8*(3), 131-156.

Jesus, J., Zoilo, J. Y., Alsola, M. C., Cortez-Roncales, M., Bontes, J. G., & Pogado, M. L. (2025). Management accounting's effect on organizational performance: The dynamics of strategic decision making.

Krishnan, C. S. N., Ganesh, L. S., & Rajendran, C. (2021). Management accounting tools for failure prevention and risk management in the context of Indian innovative start-ups: a contingency theory approach. *Journal of Indian Business Research*. 14 (1). 23-48.

Klassen, A. C., Creswell, J., Plano Clark, V. L., Smith, K. C., & Meissner, H. I. (2012). Best practices in mixed methods for quality of life research. *Quality of life Research*, *21*(3), 377-380.

Khaliq, A., Umair, A., Khaniukova, R., Iqbal, S., & Abbas, A. (2021). Leadership and Decision Making among SMEs: Management Accounting Information and the Moderating Role of Cloud Computing.

Kittredge, J. (2009). A performance framework for management accounting. *Journal of cost management*, *23*(2), 20-28.

Kaplan, R. S. (1994). Management accounting (1984-1994): development of new practice and theory. *Management Accounting Research*, *5*(3-4), 247-260.

Kaharti, E. (2023). Management Accounting Practices And Performance On Msmes In Indonesia. *Journal of Business, Finance, and Economics (JBFE)*, *4*(1), 334-347.

Kakkuri-Knuuttila, M. L., Lukka, K., & Kuorikoski, J. (2008). No premature closures of debates, please: A response to Ahrens. *Accounting, Organizations and Society*, *33*(2-3), 298-301.

Kelly, M., & Pratt, M. (1994). Management accounting texts in New Zealand: the need for a paradigm shift. *Accounting education*, *3*(4), 313-329.

Kast, F. E., & Rosenzweig, J. E. (1972). General systems theory: Applications for organization and management. *Academy of management journal*, *15*(4), 447-465.

Kabir, M. R. (2019). Management accounting dynamics in bangladesh: Areas and factors behind the changes. *Asia-Pacific Management Accounting Journal (APMAJ)*, *14*(2), 51-77.

Kennerley, M., & Neely, A. (2002). A framework of the factors affecting the evolution of performance measurement systems. *International journal of operations & production management*, *22*(11), 1222-1245.

Kyrgidou, L. P., & Spyropoulou, S. (2013). Drivers and performance outcomes of innovativeness: An empirical study. *British Journal of Management*, *24*(3), 281-298.

Kunz, J. (2015). Objectivity and subjectivity in performance evaluation and autonomous motivation: An exploratory study. *Management Accounting Research*, *27*, 27-46.

Kalifa, A. M., Triyuwono, I., Irianto, G., & Prihatiningtias, Y. W. (2020). The use and benefit of management accounting practices in Libyan oil companies. *Asian Journal of Accounting Research*. 5 (1), 91-102.

Kaplan, R. S. (1984). Yesterday's accounting undermines production.

Kaplan, R. S. (1994). Management accounting (1984-1994): development of new practice and theory. *Management Accounting Research*, *5*(3-4), 247-260.

Kariuki, S. N., & Kamau, C. G. (2016). Organizational contingencies influencing the adoption of strategic management accounting practices among manufacturing firms in Kenya. 1-16.

Klammer, T. (1973). The association of capital budgeting techniques with firm performance. *The Accounting Review*, *48*(2), 353-364.

Krumwiede, K. R. (1998). The implementation stages of activity-based costing and the impact of contextual and organizational factors. *Journal of management accounting research*, *10*, 239.

Khan, M., Sophia, J., & Shetty, P. (2025). The Evolving Role of Management Accounting in Strategic Decision-Making: A Study of Contemporary Practices in Data-Driven Enterprises. *International Journal of Research and Scientific Innovation*, *12*, 1578-1590.

Khan, S. (2021). Impact of human resource accounting on organizations' financial performance in the context of SMEs. *Accounting*, *7*(3), 621-628.

Kurniawan, A. (2021). Analysis of the effect of return on asset, debt to equity ratio, and total asset turnover on share return. *Journal of Industrial Engineering & Management Research*, *2*(1), 64-72.

Liza, M.L. (2023). Can budget ratcheting moderate the relationship between financial performance and capital expenditures?. *Journal of Data Acquisition and Processing*, *38*(3), 5472.

Lukka, K., & Mouritsen, J. (2002). Homogeneity or heterogeneity of research in management accounting?. *European Accounting Review*, *11*(4), 805-811.

Luther, R. G., & Longden, S. (2001). Management accounting in companies adapting to structural change and volatility in transition economies: a South African study. *Management accounting research*, *12*(3), 299-320.

Luther, R. G., & Longden, S. (2001). Management accounting in companies adapting to structural change and volatility in transition economies: a South African study. *Management accounting research*, *12*(3), 299-320.

Lamani, D., & Cepani, L. (2011). Internet Financial Reporting by banks and insurance companies in Albania. *The Romanian Economic Journal*, *15*(42), 159-174.

Loft, A. (1995). *The history of management accounting: relevance found*. Prentice Hall.

Li, H., Jiang, Y., Ashiq, A., Salman, A., Haseeb, M., & Shabbir, M. S. (2023). The role of technological innovation, strategy, firms performance, and firms size and their aggregate impact on organizational structure. *Managerial and Decision Economics*, *44*(4), 2010-2020.

Lybaert, N. (1998). The information use in a SME: its importance and some elements of influence. *Small business economics*, *10*, 171-191.

Laughlin, R. C. (1987). Accounting systems in organisational contexts: a case for critical theory. *Accounting, Organizations and Society*, *12*(5), 479-502.

Laughlin, R. (1995). Empirical research in accounting: alternative approaches and a case for "middle-range" thinking. *Accounting, Auditing & Accountability Journal*, *8*(1), 63-87.

Lamminmaki, D., & Drury, C. (2001). A comparison of New Zealand and British product-costing practices. *The International Journal of Accounting*, *36*(3), 329-347.

Lorenz, E. (2015). Work organisation, forms of employee learning and labour market structure: Accounting for international differences in workplace innovation. *Journal of the Knowledge Economy*, *6*(2), 437-466.

Lucas, U., & Tan, P. L. (2013). Developing a capacity to engage in critical reflection: students'‘ways of knowing’within an undergraduate business and accounting programme. *Studies in Higher Education*, *38*(1), 104-123.

Langfield-Smith, K. (2006). A review of quantitative research in management control systems and strategy. *Handbooks of management accounting research*, *2*, 753-783.

Luft, J., & Shields, M. D. (2003). Mapping management accounting: graphics and guidelines for theory-consistent empirical research. *Accounting, organizations and society*, *28*(2-3), 169-249.

Lukka, K., & Granlund, M. (1996). Cost accounting in Finland: current practice and trends of development. *European Accounting Review*, *5*(1), 1-28.

Morton, N. A., & Hu, Q. (2008). Implications of the fit between organizational structure and ERP: A structural contingency theory perspective. *International Journal of Information Management*, *28*(5), 391-402.

Makhija, M. (2003). Comparing the resource-based and market-based views of the firm: empirical evidence from Czech privatization. *Strategic management journal*, *24*(5), 433-451.

Malmi, T., & Granlund, M. (2009). In search of management accounting theory. *European accounting review*, *18*(3), 597-620.

Modell, S. (2014). The societal relevance of management accounting: An introduction to the special issue. *Accounting and Business Research*, *44*(2), 83-103.

Mitchell, F., & Reid, G. C. (2000). Problems, challenges and opportunities: the small business as a setting for management accounting research. *Management Accounting Research*, *11*(4), 385-390.

Mc-Lellan, J. D., & Sherine, F. A. A. (2013). Strategy and management accounting practices alignment and its effect on organizational performance. *Journal of Accounting–Business & Management*, *20*(1), 1-27.

Mazumder, M. I, & Ahmad, N. (2010). Greed, financial innovation or laxity of regulation? A close look into the 2007-2009 financial crisis and stock market volatility. *Studies in Economics and Finance*, *27*(2), 110-134.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European journal of general practice*, *24*(1), 9-18.

Maiga, A. S., & Jacobs, F. A. (2006). Assessing the impact of benchmarking antecedents on quality improvement and its financial consequences. *Journal of management accounting research*, *18*(1), 97-123.

Mitchell, F. (2002). Research and practice in management accounting: improving integration and communication. *European Accounting Review*, *11*(2), 277-289.

Malmi, T., & Granlund, M. (2009). In search of management accounting theory. *European accounting review*, *18*(3), 597-620.

Modell, S. (2014). The societal relevance of management accounting: An introduction to the special issue. *Accounting and Business Research*, *44*(2), 83-103.

Maher, M. W. (2000). Management accounting education at the millennium. *Issues in accounting education*, *15*(2), 335-346.

Mahlhal, A. H., Mohammed, M. A., & Jebur, A. K. (2025). Sustainable accounting information and its role in achieving the requirements of sustainable development and reducing costs. *International Journal of Managerial and Financial Accounting*, *17*(5), 1-22.

Maelani, P., & Najmudin, N. (2023). The Influence of Information Technology on Managerial Performance: Management Accounting Systems As Intervening Variables. *Jurnal Riset Akuntansi Terpadu*, *16*(1), 15-25.

Mbawuni, J., & Anertey, A. (2014). Exploring management accounting practices in emerging telecommunication market in Ghana. *Accounting and Finance Research*, *3*(4), 71-85.

Msomi, M. P., Ngibe, M., & Nyide, C. J. (2019). Factors influencing the adoption of management accounting practices (MAPs) by manufacturing small and medium enterprises (SMEs) in Durban, KwaZulu-Natal. *International Journal of Entrepreneurship*.

Munsif, V., Raghunandan, K., & Rama, D. V. (2013). Early warnings of internal control problems: Additional evidence. *Auditing: A Journal of Practice & Theory*, *32*(2), 171-188.

Malmi, T., & Brown, D. A. (2008). Management control systems as a package—Opportunities, challenges and research directions. *Management accounting research*, *19*(4), 287-300.

Mudzakar, M. K. (2021). The Effect Of Return On Asset, Return On Equity, Earning Per Share, And Price Earning Ratio Toward Stock Return (Empirical Study Of Transportation). *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(8), 387-392.

McLellan, J. D. (2014). Management accounting theory and practice: Measuring the gap in United States businesses. *Journal of Accounting, Business & Management*, *21*(1), 53-68.

Mills, Terence C., and Raphael N. Markellos. *The econometric modelling of financial time series*. Cambridge university press, 2008.

Neely, A., Gregory, M., & Platts, K. (1995). Performance measurement system design: a literature review and research agenda. *International journal of operations & production management*, *15*(4), 80-116.

Nimtrakoon, S. (2009). *Organization strategy, management techniques and management accounting practices: contingency research in Thailand* (Doctoral dissertation, University of Hull).

Nimtrakoon, S., & Tayles, M. (2015). Explaining management accounting practices and strategy in Thailand: A selection approach using cluster analysis. *Journal of Accounting in Emerging Economies*, *5*(3), 269-298.

Nguyen, D. D., Lee, T. H., Nguyen, V. Q., & Park, D. (2019). Seismic damage analysis of box metro tunnels accounting for aspect ratio and shear failure. *Applied Sciences*, *9*(16), 3207.

Nartey, S. N., & van der Poll, H. M. (2021). Innovative management accounting practices for sustainability of manufacturing small and medium enterprises. *Environment, Development and Sustainability*, *23*(12), 18008-18039.

Neergaard, H., & Ulhøi, J. P. (Eds.). (2007). *Handbook of qualitative research methods in entrepreneurship*. Edward Elgar Publishing.

Neuman, S. B., & McCormick, S. (1995). *Single-subject experimental research: Applications for literacy*. Order Department, International Reading Association, 800 Barksdale Road, PO Box 8139, Newark, DE 19714-8139 (Book No. 128: $11 members, $16 nonmembers)..

Nik Abdullah, N. H., Krishnan, S., Mohd Zakaria, A. A., & Morris, G. (2022). Strategic management accounting practices in business: A systematic review of the literature and future research directions. *Cogent Business & Management*, *9*(1), 2093488.

Nulla, Y. (2012). Is Accounting Net Profit Margin a Valid Measure of CEO Cash Compensation? A Comparative Analysis on NYSE and TSX/S&P Indexes Companies. *International Journal of Scientific & Engineering Research*, *3*(9).

Nariswari, T. N., & Nugraha, N. M. (2020). Profit growth: impact of net profit margin, gross profit margin and total assests turnover. *International Journal of Finance & Banking Studies. 9*(4), 87-96.

Ndemewah, S. R., & Hiebl, M. R. (2022). Management accounting research on Africa. *European Accounting Review*, *31*(4), 1029-1057.

Nwahaghi, F. U. (2021). Environmental Accounting and Performance of Quoted Manufacturing Companies in Niger Delta Region, Nigeria. *International Journal of Modern Innovation and Knowledge*, *2*(3), 176-188.

Noreen, E. W. (2011). *Managerial accounting for managers*. New York.

Noreen, U. (2020). The estimation of risk management efficiency and its determinants. *Jurnal Ekonomi Malaysia*, *54*(1), 69-79.

Nik Abdullah, N. H., Krishnan, S., Mohd Zakaria, A. A., & Morris, G. (2022). Strategic management accounting practices in business: A systematic review of the literature and future research directions. *Cogent Business & Management*, *9*(1), 2093488.

Nair, S. (2017). Factors affecting management accounting practices in Malaysia.

Njenga, N. M. Osiemo (2013). Effect of fraud risk management on organization performance: A case of deposit-taking microfinance institutions in Kenya. *International Journal of Social Sciences and Entrepreneurship*, *1*(7), 490-507.

Nielsen, L. B., Mitchell, F., & Nørreklit, H. (2015). Management accounting and decision making: Two case studies of outsourcing. In *Accounting Forum* (Vol. 39, No. 1, pp. 64-82). No longer published by Elsevier.

Otley, D. T., & Berry, A. J. (1994). Case study research in management accounting and control. *Management accounting research*, *5*(1), 45-65.

Oluwagbemiga, E. O. (2014). The use of voluntary disclosure in determining the quality of financial statements: evidence from the Nigeria listed companies. *Serbian Journal of Management*, *9*(2), 263-280.

Ogungbade, O. I., & Oyerogba, E. O. (2020). Firm culture and management accounting practices among manufacturing firms in Nigeria. *Future Business Journal*, *6*(1), 1-17.

O'Leary, D. E. (1987). Validation of expert systems-with applications to auditing and accounting expert systems. *Decision Sciences*, *18*(3), 468-486.

Oyerogba, E. O. (2015). Management accounting practices in the developing economies: the case of Nigeria listed companies. *The Journal of Accounting and Management*, *5*(2).

O'Connor, N. G., Chow, C. W., & Wu, A. (2004). The adoption of "Western" management accounting/controls in China's state-owned enterprises during economic transition. *Accounting, Organizations and Society*, *29*(3-4), 349-375.

Otley, D. T., & Berry, A. J. (1980). Control, organisation and accounting. *Accounting, organizations and society*, *5*(2), 231-244.

Ostaev, G. Y., Alborov, R. A., Ermakov, D. N., Belokurova, E. V., & Artemiev, N. V. (2022). Management accounting and economic security in corporate management of agricultural company operation. *Revista de la Universidad del Zulia*, *13*(36), 158-172.

Oyewo, B. M. (2017). Predictors of the effectiveness of management accounting function in Nigerian firms. *Scientific Annals of Economics and Business*, *64*(4), 487-512.

Ojra, J., Opute, A. P., & Alsolmi, M. M. (2021). Strategic management accounting and performance implications: a literature review and research agenda. *Future Business Journal*, *7*(1), 1-17.

Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management accounting research*, *31*, 45-62.

Oyewo, B. (2017). Predictors of the effectiveness of management accounting function in Nigerian firms. *Scientific Annals of Economics and Business*, *64*(4), 487-512.

Ojua, O. M. (2016). Application of strategic management accounting techniques in combating small business failures in Nigeria. *International Journal of Innovative Research studies and advances studies*, *3*(7), 19-25.

Ojra, J. (2014). *Strategic management accounting practices in Palestinian companies: Application of contingency theory perspective* (Doctoral dissertation, University of East Anglia).

Oluwagbemiga, O. E., Olugbenga, O. M., & Zaccheaus, S. A. (2014). Cost management practices and firm's performance of manufacturing organizations. *International Journal of Economics and Finance*, *6*(6), 234-239.

Ogungbade, O. I., & Oyerogba, E. O. (2020). Firm culture and management accounting practices among manufacturing firms in Nigeria. *Future Business Journal*, *6*(1), 1-17.

Pearce, J. A., Freeman, E. B., & Robinson Jr, R. B. (1987). The tenuous link between formal strategic planning and financial performance. *Academy of Management review*, *12*(4), 658-675.

Puxty, A. G., & Lyall, D. (1989). Cost Control into the 1990s: A survey of standard costing and budgeting practices in the UK.

Parker, L. D., Guthrie, J., & Linacre, S. (2011). The relationship between academic accounting research and professional practice. *Accounting, Auditing & Accountability Journal*, *24*(1), 5-14.

Phadoongsitthi, M. (2003). *The role of managerial accounting in emerging economies: An empirical study of Thailand*. University of Maryland, College Park.

Parker, L. D. (1999). Historiography for the new millennium: adventures in accounting and management. *Accounting History*, *4*(2), 11-42.

Perera, S., Harrison, G., & Poole, M. (1997). Customer-focused manufacturing strategy and the use of operations-based non-financial performance measures: A research note. *Accounting, organizations and Society*, *22*(6), 557-572.

Premkumar, G., & Potter, M. (1995). Adoption of computer aided software engineering (CASE) technology: an innovation adoption perspective. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, *26*(2-3), 105-124.

Puxty, A. G. (1993). *The social & organizational context of management accounting*. Academic Press.

Parker, L. D. (2002). Budgetary incrementalism in a Christian bureaucracy. *Management Accounting Research*, *13*(1), 71-100.

Parker, R. H. (1969). *Management accounting: An historical perspective*. Macmillan.

Paaso, I. (2013). *The effects of contingency factors on management control systems: an empirical study at CERN* (Master's thesis).

Phadoongsitthi, M. (2003). *The role of managerial accounting in emerging economies: An empirical study of Thailand*. University of Maryland, College Park.

Pourghaffar, J., Mohammadzadeh Salteh, H., Zeynali, M., & Mehrani, S. (2023). The Relationship between Performance-based Budgeting Characteristics with the Integrated Reporting Approach in the Public Sector. *Iranian Journal of Accounting, Auditing and Finance*, *7*(4), 57-75.

Pattawe, A. (2023). The consequences of electronic participatory budgeting: moderating effect of management accounting systems on managerial performance. *International Journal of Data and Network Science*, *7*(3), 973-980.

Parvizi, H., & Jamshidinavid, B. (2023). Developing a model based on the relationship between the effectiveness of the budgeting system and the value-based performance evaluation indices in the Saderat Bank of Iran. *International Journal of Nonlinear Analysis and Applications*, *14*(4), 283-296.

PHAM, D. H., DAO, T. H., & BUI, T. D. (2020). The impact of contingency factors on management accounting practices in Vietnam. *The Journal of Asian Finance, Economics and Business*, *7*(8), 77-85.

Perry, C. (1998). Processes of a case study methodology for postgraduate research in marketing. *European journal of marketing*.

Phillips, E., & Johnson, C. (2022). *How to Get a PhD: A handbook for students and their supervisors 7e*. McGraw-Hill Education (UK).

Puxty, A. G., & Lyall, D. (1989). Cost Control into the 1990s: A survey of standard costing and budgeting practices in the UK.

Panigrahi, C. M. A., & Vachhani, K. (2021). Financial analysis by return on equity (ROE) and return on asset (ROA)-A comparative study of HUL and ITC. *Panigrahi AK, Vachhani K, Financial analysis by return on equity (ROE) and return on asset (ROA)-A comparative study of HUL and ITC. J Manag Res Anal*, *8*(3), 131-138.

Purnamasari, D. (2015). The effect of changes in return on assets, return on equity, and economic value added to the stock price changes and its impact on earnings per share. *Research journal of finance and accounting*, *6*(6), 80-90.

Pasaribu, B. A. (2021). Growth Of Financial Performance PT. Gresik Cipta Sejahtera (GCS) Year 2011-2014 Using Financial Ratio Analysis. *Inspirasi & Strategi (INSPIRAT): Jurnal Kebijakan Publik & Bisnis*, *12*(1), 1-8.

Qushtom, T. F. A., Mbydeen, T., Jawad, F. S. M. A., & Razek, T. W. Y. A. (2025). The Impact of Managerial Accounting on Decision-Making Processes in Insurance Companies. In *Artificial Intelligence in the Digital Era: Economic, Legislative and Media Perspectives* (pp. 2401-2415). Cham: Springer Nature Switzerland.

Rehana, F., & Fahmin, A. (2016). Strategic management accounting techniques of manufacturing organizations of Bangladesh with special reference to satisfaction level. *DIU Journal of Business and Entrepreneurship*, *10*(02), 123-134.

Rahman, S. U., Chen, S., Al-Faryan, M. A. S., Ahmad, I., Hussain, R. Y., & Saud, S. (2023). Audit

services and financial reporting quality: The role of accounting expertise auditors. *Cogent Business & Management*, *10*(1), 2164142.

Reja, U., Manfreda, K. L., Hlebec, V., & Vehovar, V. (2003). Open-ended vs. close-ended questions in web questionnaires. *Developments in applied statistics*, *19*(1), 159-177.

Richardson, J. T. (1996). *Handbook of qualitative research methods for psychology and the social sciences*. BPS books.

Reid, G. C., & Smith, J. A. (2000). The impact of contingencies on management accounting system development. *Management Accounting Research*, *11*(4), 427-450.

Rowe, C., Birnberg, J. G., & Shields, M. D. (2008). Effects of organizational process change on responsibility accounting and managers' revelations of private knowledge. *Accounting, Organizations and Society*, *33*(2-3), 164-198.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management*, *35*(3), 718-804.

Rufino, H. (2014). Management accounting practices (MAPs) of small and medium-sized manufacturing enterprises in the city of Tarlac. *Rev. Integr. Bus. Econ. Res*, *4*(1).

Rogošić, A., & Ramljak, B. (2012). Strategic management accounting practices in Croatia. *The Journal of International Management Studies*, *7*, 93-100.

Ross, J. F. (2016). The information content of accounting reports: An information theory perspective. *Information*, *7*(3), 48.

Ryan, B., Scapens, R., & Theobald, M. (2002). Research Method & Methodology in Finance & Accounting,(Thomson, London).

Reid, G. C., & Smith, J. A. (2000). The impact of contingencies on management accounting system development. *Management Accounting Research*, *11*(4), 427-450.

Rutherford, B. A. (2003). Obfuscation, textual complexity and the role of regulated narrative accounting disclosure in corporate governance. *Journal of management and governance*, *7*, 187-210.

Rumman, G., Alkhazali, A., Barnat, S., Alzoubi, S., AlZagheer, H., Dalbouh, M., ... & Darawsheh, S. (2024). The contemporary management accounting practices adoption in the public industry: Evidence from Jordan. *International Journal of Data and Network Science*, *8*(2), 1237-1246.

Saukkonen, N., Laine, T., & Suomala, P. (2018). Utilizing management accounting information for decision-making: Limitations stemming from the process structure and the actors involved. *Qualitative Research in Accounting & Management*, *15*(2), 181-205.

Shil, N. C., & Pramanik, A. K. (2013). Application of activity based costing in manufacturing companies in Bangladesh: A survey based study. *The USV Annals of Economics and Public Administration*, *12*(1 (15)), 170-182.

Shank, J. K., & Govindarajan, V. (1993). *Strategic cost management: The new tool for competitive advantage*. Simon and Schuster.

Serena Chiucchi, M. (2013). Intellectual capital accounting in action: enhancing learning through interventionist research. *Journal of Intellectual Capital*, *14*(1), 48-68.

Shapiro, D. L., Kirkman, B. L., & Courtney, H. G. (2007). Perceived causes and solutions of the translation problem in management research. *Academy of Management Journal*, *50*(2), 249-266.

Sutjahyani, D. (2025). The Role of Performance Measurement Systems in Enhancing Managerial Decision Making: A Management Accounting Perspective. *The Journal of Academic Science*, *2*(5), 1373-1382.

Susilowati, E. (2023). Cost Management and Strategic Decision Making: The Role of Managerial Accounting. *Atestasi: Jurnal Ilmiah Akuntansi*, *6*(1), 457-473.

Simon, H. A. (1978). Rationality as process and product of thought. *American Economic Review*, 68(2), 1–16.

Szilagyi, A. D., & Wallace, M. J. (1980). Organizational behavior and performance. Santa Monica. *Calif, Goodyear Publishing Co*.

Scapens, R. W. (2006). Understanding management accounting practices: A personal journey. *The British Accounting Review*, *38*(1), 1-30.

Shil, N. C., & Pramanik, A. K. (2012). Employability management: Is higher education in crisis?. *The USV Annals of Economics and Public Administration*, *11*(2), 149-165.

Sarkar, J., Sarkar, S., & Sen, K. (2008). Board of directors and opportunistic earnings management: Evidence from India. *Journal of Accounting, Auditing & Finance*, *23*(4), 517-551.

Sarker, J. B., & Yeshmin, F. (2005). Application of responsibility accounting: Bangladesh perspective. *The Cost and Management*, *33*(6), 82-88.

Sunarni, C. W. (2013). Management accounting practices and the role of management accountant: Evidence from manufacturing companies throughout Yogyakarta, Indonesia. *Review Integrative Business & Economics Research*, *2*(2), 616-626.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. john wiley & sons.

Sieber, S. D. (1973). The integration of fieldwork and survey methods. *American journal of sociology*, *78*(6), 1335-1359.

Shields, M. D. (1998). Management accounting practices in Europe: a perspective from the States. *Management Accounting Research*, *9*(4), 501-513.

Strohhecker, J. (2016). Factors influencing strategy implementation decisions: an evaluation of a balanced scorecard cockpit, intelligence, and knowledge. *Journal of Management Control*, *27*(1), 89-119.

Shahzadi, S., Khan, R., Toor, M., & ul Haq, A. (2018). Impact of external and internal factors on management accounting practices: a study of Pakistan. *Asian Journal of Accounting Research*. 3(2), 211-223.

Shil, N. C., Hoque, M., & Akter, M. (2021). Factors Influencing the Choice of Sophisticated Management Accounting Practices-Exploratory Evidence from An Emerging Market. *EMAJ: Emerging Markets Journal*, *11*(1), 1-12.

Sharkar, M. Z. H., Sobhan, M., & Sultana, S. (2006). Management accounting development and practices in Bangladesh.

Shil, N. C., Alam, M. F., & Naznin, M. (2010). Cost and management accounting practices in Bangladesh: a survey. *International Journal of Managerial and Financial Accounting*, *2*(4), 364-382.

Shil, N. C. (2017). *Diffusion of management accounting practices in Bangladesh: Practitioners' satisfaction towards sophistication* (Doctoral dissertation, University of Dhaka).

Sharkar, M. Z. H., Sobhan, M. A., & Sultana, S. (2006). Management accounting development and practices in Bangladesh.

Sulaiman, M. B., Nazli Nik Ahmad, N., & Alwi, N. (2004). Management accounting practices in selected Asian countries: a review of the literature. *Managerial Auditing Journal*, *19*(4), 493-508.

Scherrer, G. (1996). Management accounting: a German perspective. *Management Accounting: European Perspectives*, 100-122.

Smith, M., Abdullah, Z., & Abdul Razak, R. (2008). The diffusion of technological and management accounting innovation: Malaysian evidence. *Asian review of accounting*, *16*(3), 197-218.

Shah, H., Malik, A., & Malik, M. S. (2011). Strategic management accounting—A messiah for management accounting. *Australian Journal of Business and Management Research*, *1*(4), 1-7.

Szychta, A. (2002). The scope of application of management accounting methods in Polish enterprises. *Management Accounting Research*, *13*(4), 401-418.

Szychta, A. (2002). The scope of application of management accounting methods in Polish enterprises. *Management Accounting Research*, *13*(4), 401-418.

Šiška, L. (2016). THE CONTINGENCY FACTORS AFFECTING MANAGEMENT ACCOUNTING IN CZECH COMPANIES. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, *64*(4).

Simons, R. (1987). Accounting control systems and business strategy: an empirical analysis. *Accounting, organizations and society*, *12*(4), 357-374.

Sandoval-Almazán, R., Romero-Romero, A., & Rodríguez, E. H. (2013, September). Social networks in higher education: The business administration and informatics' Students. In *2013 second international conference on e-learning and e-technologies in education (ICEEE)* (pp. 254-259).

Shenkar, O., & Ellis, S. (2022). The rise and fall of structural contingency theory: A theory's 'autopsy'. *Journal of Management Studies*, *59*(3), 782-818.

Sartorius, K., Eitzen, C., & Kamala, P. (2007). The design and implementation of Activity Based Costing (ABC): a South African survey. *Meditari: Research Journal of the School of Accounting Sciences*, *15*(2), 1-21.

Selto, F. H., Renner, C. J., & Young, S. M. (1995). Assessing the organizational fit of a just-in-time manufacturing system: testing selection, interaction and systems models of contingency theory. *Accounting, Organizations and Society*, *20*(7-8), 665-684.Ezzamel, Mahmoud, Robert W. Scapens, (2003). Gudren Baldvinsdottir, and John Burns. *The future direction of UK management accounting practice*. Cima Publishing, 2003.

Scapens, R. W. (1994). Never mind the gap: towards an institutional perspective on management accounting practice. *Management accounting research*, *5*(3-4), 301-321.

Scapens, R. W., & Yan, M. (1993). Management accounting research in China. *Management Accounting Research*, *4*(4), 321-341.Johnson, H. T. (1981). Toward a new understanding of nineteenth-century cost accounting. *Accounting Review*, 510-518.

Sharkar, M. Z. H., Sobhan, M. A., & Sultana, S. (2006). Management accounting development and practices in Bangladesh.

Sitepu, E. (2022). Analysis of Cash Ratio, Firm Size and Return on Assets that Influence Dividend Payout Ration Soe Companies Listed on the Indonesia Stock Exchange. *International Journal of Applied Finance and Business Studies*, *9*(4), 133-140.

Sulaiman, M. B., Nazli Nik Ahmad, N., & Alwi, N. (2004). Management accounting practices in selected Asian countries: a review of the literature. *Managerial Auditing Journal*, *19*(4), 493-508.

Sunarni, C. W. (2013). Management accounting practices and the role of management accountant: Evidence from manufacturing companies throughout Yogyakarta, Indonesia. *Review Integrative Business & Economics Research*, *2*(2), 616-626.

Shahzadi, S., Khan, R., Toor, M., & ul Haq, A. (2018). Impact of external and internal factors on management accounting practices: a study of Pakistan. *Asian Journal of Accounting Research*, *3*(2), 211-223.

Shank, J. K. (1989). Strategic Cost Management: New. *Journal of management accounting research*, *1*, 47-65.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, *18*(7), 509-533.

Tucker, B. P., & Schaltegger, S. (2016). Comparing the research-practice gap in management accounting: A view from professional accounting bodies in Australia and Germany. *Accounting, Auditing & Accountability Journal*.

Tucker, B., & Parker, L. (2014). In our ivory towers? The research-practice gap in management accounting. *Accounting and Business Research*, *44*(2), 104-143.

Tuttle, B., & Dillard, J. (2007). Beyond competition: Institutional isomorphism in US accounting research. *Accounting Horizons*, *21*(4), 387-409.

Dhaka University Institutional Repository

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, *18*(7), 509-533.

Tucker, B. P., & Schaltegger, S. (2016). Comparing the research-practice gap in management accounting: A view from professional accounting bodies in Australia and Germany. *Accounting, Auditing & Accountability Journal*.

Trucco, S., & Trucco, S. (2015). Financial accounting and alignment to management accounting in the Italian context. *Financial Accounting: Development Paths and Alignment to Management Accounting in the Italian Context*, 83-132.

Tucker, B., & Parker, L. (2014). In our ivory towers? The research-practice gap in management accounting. *Accounting and Business Research*, *44*(2), 104-143.

Tuttle, B., & Dillard, J. (2007). Beyond competition: Institutional isomorphism in US accounting research. *Accounting Horizons*, *21*(4), 387-409.

Tabitha, N., & Ogungbade, OI (2016). Cost accounting techniques adopted by manufacturing and service industry within the last decade. *International Journal of Advances in Management and Economics* , *5* (1), 48-61.

Tucker, M. L., Powell, K. S., & Dale Meyer, G. (1995). Qualitative research in business communication: A review and analysis. *The Journal of Business Communication (1973)*, *32*(4), 383-399.

Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a qualitative research approach. *Journal of graduate medical education*, *7*(4), 669-670.

Tuanmat, T. Z., & Smith, M. (2011). Changes in management accounting practices in Malaysia. *Asian Review of Accounting*. 19(3), 221-242.

Ter Bogt, H. J., & Scapens, R. W. (2012). Performance management in universities: Effects of the transition to more quantitative measurement systems. *European accounting review*, *21*(3), 451-497.

Tucker, B. P., & Schaltegger, S. (2016). Comparing the research-practice gap in management accounting: A view from professional accounting bodies in Australia and Germany. *Accounting, Auditing & Accountability Journal*. 29(3), 362-400.

Van Helden, G. J., & Northcott, D. (2010). Examining the practical relevance of public sector management accounting research. *Financial Accountability & Management*, *26*(2), 213-240.

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Vollmer, H. (2003). Bookkeeping, accounting, calculative practice: the sociological suspense of calculation. *Critical Perspectives on Accounting*, *14*(3), 353-381.

Wyatt, A. (2005). Accounting recognition of intangible assets: theory and evidence on economic determinants. *The accounting review*, *80*(3), 967-1003.

Webster, W. H. (2004). Accounting for managers.

Waweru, N. M. (1999). *A survey of management accounting practices by publicly quoted companies in Kenya* (Doctoral dissertation, University of Nairobi).

Waihenya, C. (2018). *Effects of Managerial Accounting Practices On Financial Performance: A Case of Manufacturing Firms in Industrial Area, Nairobi* (Doctoral dissertation, United States International University-Africa).

Wilson, R. M. S., & Chua, W. E. (1988). Managerial Accounting: Method and Meaning VNR International.

Wu, J., Boateng, A., & Drury, C. (2007). An analysis of the adoption, perceived benefits, and expected future emphasis of western management accounting practices in Chinese SOEs and JVs. *The International Journal of Accounting*, *42*(2), 171-185.

Wall, T. D., & Wood, S. J. (2005). The romance of human resource management and business performance, and the case for big science. *Human relations*, *58*(4), 429-462.

Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). On the validity of subjective measures of company performance. *Personnel psychology*, *57*(1), 95-118.

Wijewardena, H., & De Zoysa, A. (1999). A comparative analysis of management accounting practices in Australia and Japan: an empirical investigation. *The International Journal of Accounting*, *34*(1), 49-70.

Umelo, N. D., Ibanichuka, E. A. L., & Ignatius, U. (2021). Strategic Management Accounting Practices and Return on Equity of Quoted Manufacturing Firms in Nigeria. , *Managerial Finance.* 45 (3), 445-451.

Usman, A., Abbas, S., Thalita, A., & Fadila, N. (2025). The Role of Integrating Strategic Management Accounting with Big Data and Artificial Intelligence in Enhancing Financial Analysis and Decision-Making. *Journal of Comprehensive Science*, *4*(7).

Uyar, A., & Kuzey, C. (2016). Does management accounting mediate the relationship between cost system design and performance?. *Advances in accounting*, *35*, 170-176.

Dhaka University Institutional Repository

Venkatraman, N., & Ramanujam, V. (1986). Successful implementation of strategic planning systems: a path-analytic model.

van Triest, S., & Fathy Elshahat, M. (2007). The use of costing information in Egypt: a research note. *Journal of Accounting & Organizational Change*, *3*(3), 329-343.

van Der Poll, H. M. (2022). The barriers and drivers of environmental management accounting practices' adoption in developed and developing countries for sustainable development. *Sustainable Development*, *30*(5), 1222-1234.

Venkatraman, N., & Ramanujam, V. (1987). Measurement of business economic performance: An examination of method convergence. *Journal of management*, *13*(1), 109-122.

Van Helden, G. J., & Northcott, D. (2010). Examining the practical relevance of public sector management accounting research. *Financial Accountability & Management*, *26*(2), 213-240.

Wickramasinghe, D., & Alawattage, C. (2007). *Management accounting change: approaches and perspectives*. Routledge.

Wu, J., Boateng, A., & Drury, C. (2007). An analysis of the adoption, perceived benefits, and expected future emphasis of western management accounting practices in Chinese SOEs and JVs. *The International Journal of Accounting*, *42*(2), 171-185.

Warrad, L. (2015). Return on asset and return on equity effects of net operating cycle: Jordanian study. *Research Journal of Finance and Accounting*, *6*(14), 89-95.

Walle, A. H. (2015). Qualitative research in business: A practical overview.

Wu, J., Boateng, A., & Drury, C. (2007). An analysis of the adoption, perceived benefits, and expected future emphasis of western management accounting practices in Chinese SOEs and JVs. *The International Journal of Accounting*, *42*(2), 171-185.

Yalcin, S. (2012). Adoption and benefits of management accounting practices: an inter-country comparison. *Accounting in Europe*, *9*(1), 95-110.

Yeshmin, F., & Fowzia, R. (2010). Management accounting practices: A comparative analysis of manufacturing and service industries. *ASA University Review*, *4*(1), 131-141.

Yeshmin, F., & Hossan, M. A. (2011). Significance of management accounting techniques in decision-making: An empirical study on manufacturing organizations in Bangladesh. *World Journal of Social Sciences*, *1*(1), 148-164.

Dhaka University Institutional Repository

Yoshikawa, T., Innes, J., & Mitchell, F. (1995). A Japanese case study of functional cost analysis. *Management Accounting Research*, *6*(4), 415-432.

Yoshikawa, T. (1994). Some aspects of the Japanese approach to management accounting. *Management Accounting Research*, *5*(3-4), 279-287.

Yeshmin, F., & Das, S. (2009). Management accounting techniques: appraisal of managerial performance of the financial institutions in Bangladesh. *Institute of chartered Secretaries and Managers of Bangladesh (ICSMB)*, *11*(3), 25-32.

Young, S. M., & Selto, F. H. (1993). Explaining cross-sectional workgroup performance differences in a JIT facility: a critical appraisal of a field-based study. *Journal of Management Accounting Research*, *5*, 300.

Yazdifar, H., & Tsamenyi, M. (2005). Management accounting change and the changing roles of management accountants: a comparative analysis between dependent and independent organizations. *Journal of Accounting & Organizational Change*, *1*(2), 180-198.

Yeshmin, F., & Hossan, M. A. (2011). Significance of management accounting techniques in decision-making: An empirical study on manufacturing organizations in Bangladesh. *World Journal of Social Sciences*, *1*(1), 148-164.

Zare, M., Pahl, C., Rahnama, H., Nilashi, M., Mardani, A., Ibrahim, O., & Ahmadi, H. (2016). Multi-criteria decision making approach in E-learning: A systematic review and classification. *Applied Soft Computing*, *45*, 108-128.

Zuriekat, M., Salameh, R., & Alrawashdeh, S. (2011). Participation in performance measurement systems and level of satisfaction. *International Journal of Business and Social Science*, *2*(8).

Zaid, D. A., & Ahmad, I. (2020). The Impact of firms specific on the financial performance of Indian firms. *Studies in Economics and Business Relations*, *1*(1), 1-8.

Zohir, S. (2004). NGO sector in Bangladesh: An overview. *Economic and Political Weekly*, 4109-4113.

Zografou, Z., Parmova, D. S., Sdrolias, L. A. B. R. O. S., Kalogiannidis, S., & Kagioglou, F. (2025). Exploring the Role of Managerial Accounting in Enhancing Decision-Making Processes for Sustainable Business Operations in Medium-Sized Enterprises. *WSEAS Transactions on Business and Economics*, *22*(1), 1906-1927.

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Appendix Tables

Table 3.1: The Evolution of Management Accounting

Techniques	Stages	Cost determination and financial control	Information for management planning and control	Reduction of waste of resources in business processes	Creation of value through effective resource use
		1760-1950	1950-1965	1965-1985	1985 – until now
Determination of costs and accounting		Standard Cost Accounting	Double standard cost accounting		
		Direct cost accounting			
		Records of cost accounting			
		Allocation of indirect costs			
		Uniform cost accounting	Marginal cost accounting	Activity based accounting	
		Absorption cost accounting	Target cost accounting	Activity based management	
Planning		Budgeting	Discounted cash flow		
			Transfer costing		
Control		Budgeting control	Responsibility accounting		
		Return on investments	Gentani system	Constant improvement method	

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	(ROI); Ton-mile ratio			
	Variance analysis	Kaizen system	Just in time system	
Strategic Analysis			Life cycling costing	Value chain analysis
				Five forces model
				PEST, SWOT analysis
				Customer profitability and Competitors analysis
				Balanced scorecard

Source: (Gliaubicas, 2012)

Table 3.2: Characteristics of Management Account Description in Practice in Four Stages of Evolution

Description	**Stages**	**Stage 1: Cost Determination and Financial Control**	**Stage 2: Provision of Information for Management Planning & Control**	**Stage 3: Reduction of Waste in Business Resources**	**Stage 4: Creation of Value Through Effective Resources Use**

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Representative period	**1760-1950**	**1950-1965**	**1965-1985**	**1985 – until now**
Where positioned in organization:	"Similar to company secretarial"	"A 'staff' management activity"	"Management accounting is an integral part of management that is 'owned' by all managers as the line between 'staff' and 'line' management blurs".	
Role:	"A necessary technical activity in 'running' an organization".	"Providing info to support 'line' management's operations".	"Managing resources (including information) to 'directly' Enhance profits by bearing down on inputs".	"Directly enhance outputs and add value through the strategy of 'leveraging' resources (Especially information)".
Main Focus:	"Cost determination & Controlling expenditure".	"Information for management Planning, control and decision making. Including basic model building".	"Reduction of waste/loss in business resources through process analysis and cost Management technologies".	"Value creation occurs when resources are used effectively to drive customer value, shareholder value, and innovation".

Source: (Kamal, 2015)

Table 3.3: Evaluation of TMATs and TMATs in New Zealand

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Traditional Management Accounting Techniques (TMAT)
1. Direct (variable) costing
2. Full costing
3. Standard costing (prior period based)
4. Standard costing (engineering based)
Advanced Management Accounting Techniques (AMAT)
1. Activity-based costing
2. Life cycle costing
3. Target cost planning
4. Cost modeling
5. Cost of quality reporting
6. Strategic management accounting
7. Throughput accounting
8. Back flush costing

Table 3.4: Management Accounting Applications in Barbados

Management Accounting Applications
Costing System
• "A separation is made between variable/incremental costs and fixed/non-incremental costs

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- Using a plan wide overhead rate
- Departmental or multiple plant-wide overhead rates
- Activity-based costing
- Target costing
- The cost of quality
- Regression and/or learning curve techniques"

Budgeting

- "Budgeting for planning
- Budgeting for controlling costs
- Activity-based budgeting
- Budgeting with 'what if' analysis
- Flexible budgeting
- Zero-based budgeting
- Budgeting for long-term (strategic) plans"

Performance Evaluation

- "Financial measures
- Non-financial measure(s) related to customers
- Non-financial measure(s) related to operations and innovation

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- Non-financial measure(s) related to employees
- Economic value added or residual income
- Benchmarks"

Information for decision making

- "Cost-volume-profit analysis (break-even analysis) for major products
- Product profitability analysis
- Customer profitability analysis
- Stock control models
- Evaluation of major capital investment based on payback period and/or accounting rate of return
- For the evaluation of major capital investment projects by using profitability analysis or computer simulation
- Performing sensitivity 'what if' analysis when evaluating major capital investment projects
- Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation"

Strategic analysis

- "Long range forecasting
- Shareholder value
- Industry analysis

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• Analysis of competitive position
• Value chain analysis
• Product life cycle analysis
• The possibilities of integration with suppliers' and/or customers' value chains
• Analysis of competitors' strength and weaknesses"

Table 3.5: Views of Management Accounting Practice (MAP)

Management Accounting Practice (MAP)	Cultures
Activity-based Costing	"Innovation/Risk orientation. Emphasis on employees to take risk and innovation in the performance of their jobs".
Activity-based Budgeting	"Emphasis on Outcome. Focus on the result and not on how the result are achieved".
Activity-based management	"Emphasis on people. A great deal of importance on how management decisions would affect the employees. People-oriented cultures value fairness, supportiveness and respect for individual right".
Target Costing	"Aggressiveness. Competitive orientation for employees to outperform the competitors at all cost"
Life-cycle costing	"Stability. Rule orientation, bureaucratic nature".
Quality costing	"Attention to details".

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Product profitability analysis	"Emphasize precision and paying attention to details".
Just- in –Time	"Teamwork culture collaboration and emphasis on cooperation among employees".
Throughput accounting	
Benchmarking	
Backflush costing	
Balanced scorecard	
Shareholders value analysis/ economic value analysis	
Kaizen costing	
Value chain analysis	

Table 3.6: Management Accounting Applications in Ghana

Management Accounting Applications
Costing System
• A separation is made between variable/incremental costs and fixed/non-incremental costs
• Departmental or multiple plant-wide overhead rates
• Activity-based costing
• Target costing
Budgeting
• Budgeting for planning
• Budgeting for controlling costs

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- Activity-based budgeting
- Budgeting with 'what if' analysis
- Flexible budgeting
- Zero-based budgeting
- Budgeting for long-term (strategic) plans

Performance Evaluation

- Financial measures
- Non-financial measure(s) related to customers
- Non-financial measure(s) related to operations and innovation
- Non-financial measure(s) related to employees
- Economic value added
- Total Quality Management (TQM)
- Benchmarking

Information for decision making

- Cost-volume-profit analysis
- Product profitability analysis
- Customer profitability analysis
- Stock control models

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• Evaluation of major capital investment based on payback period and/or accounting rate of return
• For the evaluation of major capital investment projects by using profitability analysis or computer simulation
• Performing sensitivity 'what if' analysis when evaluating major capital investment projects
• Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation
Strategic analysis
• Long range forecasting
• Shareholder value
• Industry analysis
• Analysis of competitive position
• Value chain analysis
• Product life cycle analysis
• The possibilities of integration with suppliers' and/or customers' value chains
• Analysis of competitors' strength and weaknesses

Table 3.7: Evaluation of Management Accounting Practice (MAP)

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Stages of MAP Evaluation by IFAC(1998)	**Rank**	**Management Accounting Practice (MAP)**
Management Accounting Practice in the First stages	01.	Full (absorption) costing
	02.	Budgeting systems for planning financial [position and cash flows
	03.	Product Profitability analysis
	04.	Budgeting systems for day-to-day operations
	05.	Variable costing
	06.	Budgeting systems for coordinating activities across the business units
Management Accounting Practice in the Second stages	07.	Cost-volume-profit analysis
	08.	Cash flow return on investment
	09.	Return on investment
	10.	Controllable profit
	11.	Capital budgeting techniques (NPV, IRR, Pay back)
	12.	Divisional profit
	13.	Standard costs and variance analysis
	14.	Residual income
Management Accounting Practice in the Third stages	15.	Long range forecasting
	16.	Customer satisfaction surveys
	17.	Total quality management
	18.	Quality cost report
Management Accounting Practice in the Fourth stages	19.	Target costing
	20.	Life-cycle costing
	21.	Activity-based costing (ABC)
	22.	Activity-based Management (ABM)
	23.	Just-IN –Time(JIT)
	24.	Balanced scorecard(BSC)

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Table 3.8: Evaluation of Management Accounting Applications in Konya

Management Accounting Applications
Costing System
• A separation is made between variable/incremental costs and fixed/non-incremental costs
• Using a plan wide overhead rate
• Departmental or multiple plant-wide overhead rates
• Activity-based costing
• Target costing
• The cost of quality
• Regression and/or learning curve techniques
Budgeting
• Budgeting for planning
• Budgeting for controlling costs
• Activity-based budgeting
• Budgeting with 'what if' analysis
• Flexible budgeting
• Zero-based budgeting
• Budgeting for long-term (strategic) plans

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Performance Evaluation
• Financial measures
• Non-financial measure(s) related to customers
• Non-financial measure(s) related to operations and innovation
• Non-financial measure(s) related to employees
• Economic value added or residual income
• Benchmarks
Information for decision making
• Cost-volume-profit analysis (break-even analysis) for major products
• Product profitability analysis
• Customer profitability analysis
• Stock control models
• Evaluation of major capital investment based on payback period and/or accounting rate of return
• For the evaluation of major capital investment projects by using profitability analysis or computer simulation
• Performing sensitivity 'what if' analysis when evaluating major capital investment projects
• Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation

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Strategic analysis
• Long range forecasting
• Shareholder value
• Industry analysis
• Analysis of competitive position
• Value chain analysis
• Product life cycle analysis
• The possibilities of integration with suppliers' and/or customers' value chains
• Analysis of competitors' strength and weaknesses

Table 3.9: Cost Accounting in Istanbul

Product Costing Method	**Overhead allocation base to calculate product cost**	**Application of costing information**	**Perceived importance of Management Accounting Practice**
Job costing	Direct labor hour	Pricing decisions	Budgeting
Process costing	Direct labor cost	Customer profitability	Planning and control
Activity based costing	Machine hour	Performance measurement	Cost-volume-profit analysis
Not specified	Units produced	Activity analysis	Target costing
	Direct material cost (DMC)	Make or buy decisions	Quality cost reporting

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	DMC+DLC (Prime costs)	` Product mix decisions	Performance measurement and evaluation
	Other	Adding or deleting products	Responsibility accounting
			Standard costing and variance analysis
			Strategic planning
			Transfer pricing

Table 3.10: Evaluation of MAP in Egyptian Manufacturing Firms

Advanced Management Accounting Practice (AMAP)	Innovative Managerial Practice (IMPs)	Advanced Manufacturing Techniques (AMTs)
Benchmarking of Performance	Just-In-Time (JIT)	Flexible Manufacturing Systems (FMS)
Strategic Management Accounting	Total Quality Management (TQM)	Computer Aided Design (CAD)
Customer Profitability Analysis (CPA)	Total Preventive Maintenance (TPM)	Computer Aided Manufacturing (CAM)
Activity-Based Costing (ABC)	Materials Requirements/ Resource Planning (MRPI/II)	Computer Integrated Manufacturing (CIM)
Activity-Based Budgeting (ABB)	Enterprise Requirement Planning (ERP)	Computer Numerical Control (CNC)
Activity-Based Management (ABM)	Optimized Production Technology (OPT)	Computer Aided Engineering (CAE)

Table 3.11: Evaluation of Management Accounting Quality

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Management Accounting Tasks	Management Accounting Tools
Business Performance Evaluation	Budgets
Financial/Cost Control	Cost Variance Analysis
Profit Improvements	Standard Costing
Budgeting	Activity Based Costing (ABC
Fixed Assets Investment Planning	Balance Scorecard
Tactical Decision making	Total Quality Management
Productivity/Efficiency Improvement	Business Forecasting
Generating Customer Value	Just In Time
Product Quality Management	Cost Driver analysis
Continues Improvement	Target Costing
Managing customer/supplier relationships	Value added analysis
Managing Information Technology	

Table 3.12: Comparison between (TMAP) and (CMAP)

Traditional Management Accounting Practice (TMAP)
1. Budget
2. Standard costing & variance analysis
3. Return on Investment
4. CVP analysis
Contemporary Management Accounting Practice (CMAP)
1.Total Quality Management (TQM)
2. Activity based Costing(ABC)
3.Target Costing
4.Balanced Scorecards

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Table 3.13: Management Accounting Practice in Pakistan

Management Accounting Practice
Costing practice:
1. Fixed and variable costs;
2. Overhead rates on the basis of plant and department;
3. Learning curve;
4. Cost of quality;
5. Target costing;
6. Activity based costing
Budgeting Practice:
1. Planning purposes budgeting;
2. For controlling cost budgeting;
3. For strategic planning;
4. Flexible budgeting;
5. Activity based budgeting;
6. Zero based budgeting
Decision making Practice:
1. Profitability analysis about the product;
2. Break even analysis or cost volume profit analysis

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3. Cash flows;
4. Time value of money and payback period
5. Profitability analysis about the customer;
6. Profitability analysis;
7. Some non-financial decision making
Performance evaluation Practice
1. Financial measures
2. Non financial measures that are related to the operation and innovation
3. Non financial measures that are related to customers;
4. Benchmark of performance evaluation;
5. Non financial measures about employees

Table 3.14: Identifies Different Management Accounting Practice

SL	Management Accounting Practice	Fowzia & Afroze (2016)	Yeshmin (2015)	Yeshmin & Hossan (2011)	Fowzia & Nasrin (2011)	Yeshmin & Fowzia (2010)	Sharkar, Sobhan & Sultana (2006)
	Department or multiple plant-wide overhead rates						

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	Separation of variable cost, incremental cost and fixed cost						
	Variable costing		√	√	√	√	√
	Job order costing		√		√		√
	Batch costing						
	Process costing		√		√		√
	Absorption Costing/ Full cost accounting		√	√	√		√
	The cost of quality (Quality Costing)	√			√		
	Attribute costing	√			√		
	Cost-benefit analysis		√				
	Service costing		√				
	Contract costing		√				
	Uniform costing		√				
	Operation Costing		√				√
	Least square method		√				
	High low method		√				
	Activity based Costing (ABC)		√	√	√	√	√
	Standard costing		√	√	√		√
	Target Costing	√	√	√	√	√	√
	Life Cycle Costing	√	√		√		√
	Differential costing		√	√	√		
	Opportunity Costing		√	√	√		
	Value Chain Costing	√			√		
	Back-Flush costing				√		

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	Throughput Costing		√		√		√
	Six sigma		√				
	Kaizen Costing		√	√	√		
	Value engineering		√				
	Total Quality Management (TQM)		√	√		√	
	Budgetary Control		√	√		√	√
	Budgeting for (short term) planning						
	Budgeting for controlling cost						
	Master budgets						
	Flexible budget						√
	Activity-based budgeting (ABB)						
	Zero-based budgeting (ZBB)						
	Budgeting for long term(strategic) plans						
	Budgeting with “what if analysis”						
	Continuous/rolling budget						
	Ratio Analysis			√			
	Cash flow Statement Analysis		√	√			
	Financial Statement Analysis		√			√	
	Variance Analysis		√	√		√	

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	Fund Flow Analysis		√			√	
	Economic value add (EVA) or Residual income		√				
	Return on Investment (ROI)		√				
	Segment Reporting		√	√		√	
	Balance Scorecard		√			√	
	Non-financial measure(s) related to customers						
	Non-financial measures(s) related to operation and innovation						
	Non- financial measure(s) related to employees						
	Cost-Volume-Profit Analysis	√	√	√		√	√
	Product profitability analysis						
	Stock control models (Inventory)						
	Evaluation the risk of major capital investment projects by using probability analysis or computer simulation						√
	Evaluation of major capital investments based on discounted cash flow method(s)						√
	Evaluation of major capital investments based on pay-						√

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	back period or average rate of return						
	Evaluation of major capital investments based on Net present value and Internal rate return (IRR)						
	Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation						
	Performing sensitivity "what if" analysis when evaluating major investment project						
	Industry analysis						
	Shareholder value						
	Inter-firm Comparison		√	√			
	Long-range forecasting						
	Analysis of competitive position						
	Value chain analysis						
	Product life cycle analysis						
	Just In Time		√	√			
	Risk Management		√				
	Analysis of competitors' strength and weaknesses						
	Customer Accounting	√					
	Benchmarking	√					

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	Customer profitability analysis						
	Integrated performance measurement system	√					
	Lifetime customer profitability analysis	√					
	Valuation of customer as assets	√					
	Process Reengineering		√	√			
	Theory of Constraints (TOC)		√	√		√	
	Management by Exception (MBE)		√	√		√	
	Brand valuation	√					
	Strategic Pricing	√					
	Strategic costing	√			√		
	Value based management (VBM)		√				
	Responsibility Accounting		√	√		√	
	Competitive position monitoring	√					
	Competitor cost assessment	√					
	Competitor performance appraisal based on published financial statements	√					
	Resource consumption accounting (RCA)		√				
	Transfer pricing		√				

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	Enterprise resource planning (ERP)		√				
	Human resource accounting (HRA)		√				
	Environmental management accounting (EMA)		√				

Table 3.15: Summary of the Studies about the Association between Company Size and MAP

Studies	Context	Dependent factors	Result
Puxty and Lyall (1989)	453 industrial companies in UK	The implementation of standard costing and budgeting systems	Positive and significant association
Drury and Tayles (2000)	187 large manufacturing and non-manufacturing organizations in UK	The complexity level of costing system	Positive and significant association
Waldron and Everett (2004)	US manufacturing companies	Usage of traditional and advanced MAP	Positive and significant association
Alebaishi (1998)	Saudi owned and joint ventures companies	The implementation of MAP	Positive and significant association
Isa and Thye (2006)	Malaysian manufacturing companies	Usage of traditional and advanced MAP	No association
Libby and Waterhouse (1996)	Medium size manufacturing	MA and control systems	No association

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	organizations in Canada		
Williams and Seaman (2001)	Manufacturing companies in Singapore	changes in the MAP	No association

Table 16: Financial Performance Measurement Criteria

Return on assets (ROA)	Return on equity (ROE)	Return on investment (ROI)	Net profit margin
"An indicator of how profitable a company is relative to its total assets. The ROA figure gives investors an idea of how effective the company is in converting the money it invests into net income."	"Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity. ROE is considered a measure of how effectively management is using a company's assets to create profits."	"Return on investment (ROI) is a financial ratio used to calculate the benefit an investor will receive in relation to their investment cost. It is most commonly measured as net income divided by the original capital cost of the investment. The higher the ratio, the greater the benefit earned."	"Net profit margin is one of the most important indicators of a company's financial health. By tracking increases and decreases in its net profit margin, a company can assess whether current practice are working and forecast profits based on revenues. Here it is possible to compare the profitability of two or more businesses regardless of size."

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Table 3.17: Evaluation of MAP in Ghana

Independent Variable **Management Accounting Practice**	**Dependent Variable** **Organizational Performance**	**Determinants of** **Management Accounting Practice**	**Benefits ensures by Management Accounting Practice**
Costing system	Level of productivity	Market competition	Planning the future strategies
Budgeting system	Product quality	Accounting staff	Tactics and operations
Performance evaluation system	Number of deliveries on time	Owner/management participation	Controlling current activities
Strategic management accounting	Sales growth rate	Changes in technology	Measuring and evaluating performance
Information for decision making	Operating profit growth rate		Optimizing the use of firm resources
	Cash flow growth rate		Reducing subjectivity in the decision making process
			Improving internal and external communication

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Table 3.18: Financial Performance of Manufacturing Companies in Kenya.

Dependent Variable (Management Accounting Practice)	Independent Variable
Costing System	
• A separation is made between variable/incremental costs and fixed/non-incremental costs	
• Using a plan wide overhead rate	
• Departmental or multiple plant-wide overhead rates	
• Activity-based costing	
• Target costing	
• The cost of quality	
• Regression and/or learning curve techniques	
Budgeting	
• Budgeting for planning	
• Budgeting for controlling costs	
• Activity-based budgeting	
• Budgeting with 'what if' analysis	
• Flexible budgeting	
• Zero-based budgeting	
• Budgeting for long-term (strategic) plans	
Performance Evaluation	
• Financial measures	
• Non-financial measure(s) related to customers	
• Non-financial measure(s) related to operations and innovation	

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• Non-financial measure(s) related to employees	**FINANCIAL PERFORMANCE** **Return on Asset = Net Income / Total Asset**
• Economic value added or residual income	
• Benchmarks	
Information for decision making	
• Cost-volume-profit analysis (break-even analysis) for major products	
• Product profitability analysis	
• Customer profitability analysis	
• Stock control models	
• Evaluation of major capital investment based on payback period and/or accounting rate of return	
• For the evaluation of major capital investment projects by using profitability analysis or computer simulation	
• Performing sensitivity 'what if' analysis when evaluating major capital investment projects	
• Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation	
Strategic analysis	
• Long range forecasting	
• Shareholder value	
• Industry analysis	
• Analysis of competitive position	
• Value chain analysis	
• Product life cycle analysis	

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• The possibilities of integration with suppliers' and/or customers' value chains	
• Analysis of competitors' strength and weaknesses	