

College of Education and Language Studies

Department of Educational Planning and Management

Strategic Management Practices in Higher Education: Analysis of Perceived Efficiency and Effectiveness in Comprehensive Universities in Ethiopia

By: Manaye Abera Shamelo

A Dissertation Submitted to the Department of Educational Planning and Management of Addis Ababa University, in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Educational policy and Strategic management.

May/2026

Addis Ababa

Strategic Management Practices in Higher Education:
Analysis of Perceived Efficiency and Effectiveness in Comprehensive Universities in Ethiopia

By: Manaye Abera Shamelo

Advisors:
Jeilu Oumer (PhD); Associate professor; Addis Ababa University
Demoze Degefa (PhD); Assistant professor; Addis Ababa University

May/2026
Addis Ababa

A Dissertation Entitled:

Strategic Management Practices in Higher Education: Analysis of Perceived Efficiency and Effectiveness in Comprehensive Universities in Ethiopia

We, hereby certify that this dissertation submitted by Manaye Abera Shamelo confirms to acceptable standard and as such is fully adequate in scope and quality. It is, therefore, approved as the fulfillment of the Dissertation requirements for the degree of Doctor of Education in Educational Policy and Strategic management.

Approved by:

---------- ----------

Advisor Date

---------- ----------

Internal Examiner Date

---------- ----------

External Examiner Date

---------- ----------

Chairperson of the Department Date

Declaration

I, Manaye Abera declare that this Dissertation is a result of my independent research work on the topic entitled "*Strategic Management Practices in Higher Education*: Analysis of Perceived Efficiency and Effectiveness in Comprehensive Universities in Ethiopia" in partial fulfillment of the requirements for the Doctoral degree in education, in policy and strategic Management at Addis Ababa University college of education and language studies. This work is original in nature and has not been presented for a degree in any other University. All the references are also duly acknowledged.

Manaye Abera

Signature_____

Date _____

Acknowledgements

First and foremost, I'd want to convey my heartfelt gratitude to the amazing people who supported and directed me along this transforming journey, allowing me to successfully complete my doctorate despite numerous unexpected obstacles that arose.

Second, I'd like to thank my supervisors, Dr. Jeilu Oumer for his significant assistance, scholarly guidance, and encouragement throughout the process. From the early stages of refining my research proposal to the final submission of my dissertation, his patience, unwavering presence, wealth of wisdom, generous feedback, and consistently positive encouragement have been invaluable in shaping and maintaining my academic progress. In addition, I'd like to thank my co-adviser, Dr. Demoze Degefa, for his assistance and encouragement to improve as a professional researcher, as well as for sharing his broad and deep understanding of the area. He mentored, supported, taught, and coached me so much that I ended up where I am today.

My sincere thanks go to the target universities and Ministry of Education for granting me permission to conduct the research in their respective institutions. Special thanks should be extended to the academic vice presidents, president office heads, College deans, academic staff and chairpersons' student's union at the universities who contributed to the study. Their willingness and wholehearted participation made this study a reality.

Finally, a special appreciation goes to my family for believing in my potential. I want to offer my heartfelt appreciation to my wife, Alemitu Selgen Mia. Thank you for being with me through the highs and lows of this academic adventure. Her encouragement, wisdom, genuine affection, and faith in me have been a source of strength and inspiration. Still, I'd want to thank my daughters Eden, Tsion, and Kidist for allowing me to devote time and resources to the study.

Manaye Abera
January / 2026
Addis Ababa University

Abstract

This dissertation examined the perceived efficiency and effectiveness of strategic management practices (SMPs) in Ethiopian public comprehensive universities. An explanatory sequential mixed-methods design (QUAN→QUAL) was employed. Quantitative data were collected from 744 respondents across eight universities, while qualitative evidence was generated through interviews, focus group discussions (n = 75), and document analysis. Data were analyzed using SPSS version 27 and SPSS AMOS version 23. The findings revealed that environmental scanning demonstrated moderately institutionalized, *with SWOT analysis widely utilized, whereas advanced tools such as PESTEL analysis, stakeholder analysis, and student needs assessment remained largely underutilized (M = 2.75). The measurement model demonstrated* excellent fit *($\chi^2/df = 1.378$; CFI = 0.962; TLI = 0.965; RMSEA = 0.068 with* acceptable reliability *($\alpha = .76$), while Structural Equation Modeling (SEM) confirmed that environmental scanning had strong positive and statistically significant effects on efficiency ($\beta = 0.61$, $p < .001$, $R^2 = 22\%$) and effectiveness ($\beta = 0.65$, $p < .001$, $R^2 = 18\%$). Strategy formulation was weak and insufficiently institutionalized (M = 2.48). Although universities demonstrated relative strength in developing mission and vision statements, they faced major limitations in setting SMART goals, prioritizing strategic actions, and allocating resources effectively.* The measurement model demonstrates excellent fit *($\chi^2/df = 1.378$; CFI = 0.962; TLI = 0.965; RMSEA = 0.068)*, with strong reliability *($\alpha = 0.83$)*, while *SEM results indicated that strategy formulation positively influenced efficiency ($\beta = 0.28$, $p < .001$) and effectiveness ($\beta = 0.18$, $p < .001$). Strategy implementation was similarly weak, centralized, and resource-constrained (M = 2.49), with limited structural alignment and incentive mechanisms. The measurement model demonstrated excellent fit ($\chi^2/df = 1.167$; CFI = 0.992; TLI = 0.991; RMSEA = 0.069) with strong $\alpha = 0.81$), indicating consistent, while SEM results confirmed significant positive effects on efficiency ($\beta = 0.32$, $p < .001$, $R^2 = 23\%$) and effectiveness ($\beta = 0.28$, $p < .001$, $R^2 = 19\%$). Likewise, M&E shows a moderate overall level (M= 2.68), indicating it is not fully institutionalized. The measurement model demonstrates good fit ($\chi^2/df = 1.263$, GFI = 0.852, CFI = 0.989, TLI = 0.998, RMSEA = 0.065) with strong reliability ($\alpha = 0.87$), while SEM results confirm that M&E has a positive and significant effect on both efficiency ($\beta = 0.31$, CR = 5.01, $p < 0.001$, $R^2 = 21\%$) and effectiveness ($\beta = 0.37$, CR = 5.12, $p < 0.001$, $R^2 = 18\%$). Overall, SMPs were moderately institutionalized and characterized by top-down approaches, weak stakeholder participation, limited communication, resource constraints, and unstable policy environments, which undermined universities' ability to achieve strategic objectives. The study recommends strengthening institutional autonomy, performance-based funding, participatory planning, governance systems, and infrastructure to improve strategic efficiency, effectiveness, and sustainable institutional transformation.*

Key Words: Strategic management practices, Higher education institutions, Perceived efficiency, perceived effectiveness, comprehensive Universities

ACRONYMS/ABBREVIATIONS

AAU = Addis Ababa university

ATEC = Australian Tertiary Education Commission

BC = Before Christ

BPR = Business Process Reengineering

BSC = Balanced Scorecard

CSFs = Critical Success Factors

CU = Comprehensive university

CUE = Commission for University Education

DUC = Differentiated Unit Costs

EDPM = Educational Planning and Management

EIC = Ethiopian Insurance Company

ESDP = Education Sector Development Program

ETA = Education and Training Agency

GRDI = Green Research Development Institute

GTP – Growth and transformation program

HEIs = Higher Education Institutions

HELB = Higher education loan Board

HR = Human Resource

HRM = Human resource management

ICT = Information communication technology

IO = Industrial Organization

KPIs = Key Performance indicators

KT = Knowledge Transfer

LMS= Learning management System

MM = Mixed Methods

MoE = Ministry of Education

M&E = Monitoring & Evaluation

MOSHE = Ministry of Science and higher education

NCHE = National Council of higher education

NIE = National Institute of Education

NGO = Non-Government organization

NPM = New Public Managerailism

NSFAS = National Student Financial Aid Scheme

Op = Organizational Performance

PBF = Performance-Based Funding

PESTEL = Political, Economic, Social, Technological, Environmental & Legal

PDCA = Plan-Do-Check- Act

PPBS = Programming-Planning-Budgeting-System

QAA = Quality Assurance Agency

RAE = Research Assessment Exercise

RBT = Resource- based theory

RD = Research and Development

SCA = Sustainable Competitive Advantage

SCFM = Student-centered Financial Model

SI = Strategy implementation

SM = Strategic management

SMART = Specific, Measurable, Achievable, Realistic & Time bounded

SP = Strategic Planning

SWOT = Strengths, Weaknesses, Opportunities, & Threats

SMTTs = Strategic Management Tools and Techniques

TVET = Technical & Vocational Education and Training

UAS = University of Applied Sciences

UGC = University Grant Committee

UK = United Kingdom

UMT = Uncertainty Management Theory

UNESCO = United Nations Educational, Scientific & Cultural Organization

USA = United States of America

VIF = Variance Inflation Factor

VRIN = Valuable, rare, inimitable and Non-substitutable resources

Table of Contents

Acknowledgements iv
Abstract v
ACRONYMS/ABBREVIATIONS vi
List of Tables xv
List of Figures xvii
CHAPTER ONE 1
1. INTRODUCTION 1
1.1. Background of the Study 1
1.2. Statement of the Problem 4
1.3. Research Questions 8
1.4. Hypothesis 9
1.5. The Objective of the Study 10
1.5.1. The Specific Objective of the Study 10
1.6. Significance of the Study 11
1.7. Scope of the Study 12
1.8. Limitations of the Study 13
1.9. Delimitations of the study 14
1.10. Definitions of Key Terms 16
1.11. Conceptual Framework of the Study 17
1.12. Organization of the study 18
CHAPTER TWO 20
2. REVIEW OF THE RELATED LITERATURE 20
Introduction 20
2.1. Theoretical Foundations: Competing and Complementary lenses 20
2.1.1. Defining Strategic Management: Core Concepts and Debates 20
2.1.2. Theoretical Foundation of the Study 22
2.1.2.1. Strategic Fit Theory (SFT): Origins, Propositions, and Critiques 23
2.1.2.2. Resource-Based Theory/View (RBV): Origins, Propositions, Critiques 25
2.1.2.3. Institutional Theory: Origins, Propositions, Critiques 27
2.1.2.4. Justification for the study's Theoretical Framework 28
2.2. Strategic Management in Higher Education: Global Context and Debates 29

2.2.1. The Emergence of Strategic Management in Higher Education Institutions 31
2.2.2. Core Components of Strategic Management in HEIs: A Synthetic Review 33
2.2.2.1 Environmental Scanning.....34
2.2.2.2 Strategy Formulation 34
2.2.2.3 Strategy Implementation.....35
2.2.2.4 Strategy Monitoring and Evaluation 36
2.2.3. The Efficiency Construct in Higher Education: Measurement and Debates 36
2.2.4. The Effectiveness Construct in Higher Education: Stakeholder Perspectives 37
2.2.5. Critical Success Factors for Strategic management practices in HEIs.....38
2.3. Strategic Management in Developing Country HE: The Ethiopian Context.....39
2.3.1. Historical Trajectory of Ethiopian Higher Education 40
2.3.2. Quantitative Overview: Access, Resources, and Outcomes 42
2.3.3. Policy Framework Evolution: From Compliance to Strategic Management.....42
2.3.4. University Differentiation: Comprehensive University as a Category 43
2.3.5. University Autonomy: Dimensions, Global Perspective, and Ethiopian Context 44
2.3.6. Key Performance Indicators (KPIs) for Performance Evaluation in HEIs.....46
2.3.7. Empirical Evidence on Strategic Management in Ethiopian Universities 47
2.3.8. The Compliance Trap: How Ministry Oversight Shapes Strategic Behavior.....48
2.3.9. Identified Gaps in the Ethiopian Literature 48
2.4. Comparative Perspective: Sectorial Analysis of SM in Ethiopian HEIs 49
2.5. Empirical Evidence on SM Efficiency and Effectiveness in Higher Education 50
2.5.1 Conceptual Foundations of Efficiency and Effectiveness in Strategic Management ...50
2.5.2 Empirical Evidence on Efficiency of Strategic Management in HEIs 51
2.5.3 Empirical Evidence on Effectiveness of Strategic Management in HEIs 51
2.5.4 Strategic Management Components and Performance Outcomes in HEIs 52
2.5.5 Integrated Analysis of Efficiency and Effectiveness in HEIs.....52
2.5.6. Theoretical Explanations of Efficiency and Effectiveness in HEIs 52
2.5.7 Methodological Approaches in Existing Studies 54
2.5.8 Meta-Analytical and Cross-Study Insights.....54
2.5.9 Methodological Limitations in Existing Research 54
2.5.10 Research Gap and Contribution of the Present Study 55
2.6 Leadership, Governance, and Strategic Management in Higher Education 55

2.6.1 Conceptual Distinctions: Leadership, Governance, and Strategic Management 55
2.6.2 Governance Structures in Higher Education: International Perspectives 57
2.6.3 Leadership Competencies for Strategic Management in Higher Education 58
2.6.4 Linking Governance, Leadership, and SM to Efficiency and Effectiveness 58
2.6.5 Theoretical Foundations of the Governance–Leadership–SM Nexus 59
2.6.6 The Governance–Leadership Alignment Model 60
2.6.7 Implications for the Present Study 61
2.7 Factors Influencing Strategy Implementation in Higher Education Institutions 61
2.7.1 Individual-Level Factors Influencing Strategy Implementation 62
2.7.2 Organizational and Structural Factors Influencing Strategy Implementation 63
2.7.3 Environmental-Level Factors Influencing Strategy Implementation 64
2.7.4 An Integrated Multilevel Framework of Strategy Implementation 65
2.7.5 Application to Ethiopian Comprehensive Universities 65
2.8. Experiences of SM practices in HEIs from some Selected Countries 66
2.8.1. United States of America Scenario: 67
2.8.2. Europe Scenario: 68
2.8.3. Australia Scenario: 70
2.8.4. Asia Scenario 72
2.8.5. Africa Scenario 74
2.8.6. Justification for the Selection of Countries' Experiences in Relation to SM Practices 77
2.8.7. Lessons Learned from Multi-Regional Scenarios 79
2.9. Chapter Summary and Synthesis 82
CHAPTER THREE 85
RESEARCH DESIGN AND METHODLODY 85
3.1. Research Paradigm and Philosophical Assumption 85
3.1.1. Research Paradigm: 85
3.1.2. The Philosophical Assumption of Research Paradigm: 86
3.2. Research Design 89
3.3. Research Approach 91
3.4. Data Source 93
3.5. A Brief Overview of the Context of the Sample Universities 94

3.6. Study population, Sampling Techniques and Sample Size 99
3.6.1 Study Population 99
3.6.2 Sampling Design/Techniques 100
3.6.3. Sample Size 101
3.8. Data Collection Method and Data Collection instruments 102
3.8.1. Data Collection Method: Sequential Explanatory (QUAN → QUAL) Design 102
3.8.2 Data Collection Instruments 106
3.8.2.1 Questionnaire 106
3.8.2.2 Interviews 107
3.8.2.3 Focus Group discussions (FGDs) 110
3.8.2.4 Document Review 111
3.9. Ensuring Quality of Data 112
3.9.1. Validity Test 112
3.9.2. Test of Reliability (Internal Consistency) of the Questionnaire 113
3.9.3. Assessment of Common Method Bias 115
3.10. Data Analysis Techniques and Presentation 116
3.10.1. Data Analysis 116
3.10.2 Data Presentation 120
3.11. Triangulation 121
3.12. Operationalization of Variables and Measurement 121
3.13. Ethical Consideration 125
CHAPTER FOUR 128
4. Results and Discussions 128
Introduction 128
4.1. Characteristics of the Respondents 128
4.2. Demographic Evidence of the Participants 129
4.3. Data Presentation, analysis and Discussion 133
4.4. Theme 1: Environmental Scanning 134
4.4.1 Descriptive Analysis of Environmental Scanning Dimensions 134
4.4.2 Structural Equation Model Analysis for Environmental Scanning 140
4.4.2.1. Measurement Model Analysis for Environmental Scanning(ES) 141
4.4.2.2. Structural Model Results 142

Path diagram for Environmental Scanning 143
Source: SPSS AMOS (2026).....144
4.4.3 Qualitative Data Analysis of Environmental Scanning.....144
4.4.4 Overall Intergradation & explanatory interpretation for Analysis of Environmental Scanning Practices 147
4.5. Theme 2: Strategy Formulation.....150
4.5.1 Quantitative (Descriptive) Analysis of Strategy formulation Dimensions.....150
4.5.2. Structural Equation Model for Strategy Formulation (SF).....156
4.5.2.1. Measurement Model for Strategy formulation (SF).....156
4.5.2.2. Structural Model Results for Hypothesis Testing 158
4.5.3 Qualitative Data Analysis of Strategy Formulation Dimensions.....159
4.5.4 Integrated Interpretation of Strategy Formulation Findings.....162
4.6. The practices of Communicating the Strategy 163
4.6.1. Descriptive Analysis of Strategy Communication.....164
4.6.2 Correlation Analysis of strategy Communication.....169
4.6.3 Qualitative Analysis of Strategy Communication.....172
4.6.4 Overall Integration and Explanatory Interpretation for Strategy Communication 174
4.7. The approaches to Develop Strategies.....178
4.7.1. Descriptive Analysis of approaches to strategy Development 178
4.7.2. Qualitative Data Analysis for approach adopted to develop strategies.....182
4.7.3. Overall Integration & explanatory interpretation for Strategy Development.....184
4.7. Theme 3: SM framework alignment with Strategy Implementation outcomes 187
4.7.1. Quantitative Analysis of SM framework alignment with Strategy implementation outcomes.....187
4.7.2. Structural Equation Model Analysis for strategy Implementation 193
4.7.2.1 Measurement Model Analysis for strategy management framework alignment with Implementation outcomes 193
4.7.2.2. Structural Model Results 195
4.7.2.4. Path Diagram of Structural Equation Model: Strategy Implementation 196
4.7.3 Qualitative data analysis on Strategic framework alignment with Strategy Implementation outcomes 198
4.7.4. Integration of SM framework alignment with Implementation outcomes 200

4.8.1. Descriptive analysis of CSFs for Strategy Implementation 203
4.8.2 Factor analysis of CSFs influencing Strategy Implementation 211
4.8.2.1.Kaiser-Meyer-Olkin (KMO) and Bartlett's Test 211
4.8.2.2.Total Variance Explained: 212
4.8.2.3. Scree plot 213
4.8.3 Qualitative Data analysis on CSFS 214
4.8.4 Overall integration and explanatory interpretation for CSFs Influencing Strategy Implementation 217
4.9. Theme.4 Strategy Monitoring and Evaluation 220
4.9.1. Descriptive analysis of Monitoring and Evaluation Dimensions. 220
4.9.2. Structural Model Analysis for M&E 225
4.9.2.1 Measurement Model Analysis for Monitoring &Evaluation (M&E) 225
4.9.2.2. Structural Model Results: Hypothesis Testing 227
4.9.3 Qualitative Analysis on Monitoring and Evaluation Dimensions 229
4.9.4 Overall integration & Explanatory interpretation for Monitoring and Evaluation 231
4.10 Major Challenges Affecting SM Practices and Mitigation Measures. 234
4.10.1. Quantitative analysis on internal factors Affecting SM Practices 234
4.10.2 Qualitative Data Analysis on internal factors affecting SM practices 239
4.10.3 Integrated Results on Internal Factors Affecting SM Practices 240
4.11. External variables that can affect SM Practices 241
4.11.1 Descriptive analysis of External variables that can affect SM Practices 241
4.12 Chapter Summary 244
CHAPTER FIVE 225
5. Summary of Major Findings, Conclusions, Recommendations 225
Introduction 225
5.1. Summary of the Major Findings 226
5.2. Conclusions 234
5.3 Propose Structural Model for SM practices in higher education institutions. 240
5.4. Recommendations 242
5.5. Future Research implications/Limitations 246
5.6 Implications 247
5.6.1. Theoretical Implications 247

5.6.2 Practical Implications 247
5.6.3.Managerial Implications 247
References 249
Appendixes 280
Appendix:1 280
Annex 2. 287
Annex 3. 289

List of Tables

Table 3.1.Sample Determination 102
Table: 3.2 Qualitative Follow-up Interview Questions Developed from Quantitative Findings 109
Table 3.3 Test of Reliability 114
Table 3.4.Integrated Summary of Research Design and Methodology 127
Table 4.1 Demographic Information of Respondents of the Study 130
Table 4.2 Demographic information of interviewee & focus group discussion participant 132
Table 4.3 an aggregate responses on the Practice of Environmental scanning 135
Table 4.4.Measurement Model Assessment for Environmental Scanning (ES) 141
Table 4.5: CFA Overall Measurement Model Fit 142
Table 4.6: Structural Model Results (Hypothesis Testing) 143
Table 4.7: An aggregate responses on the Practice of Strategy Formulation.....151
Table 4.8.-Measurement Model Assessment for Strategy Formulation (SF).....156
Table 4.9 CFA Overall Measurement Model Fit 157
Table 4.10: Structural Model Results: Hypothesis (H2) Testing 158
Table 4.11 an aggregate responses on the practices of communicating the strategy.....164
Table 4 12. Correlation Analysis of Strategy Communication 170
Table 4.13: Approach to Develop Strategies.....179
Table 4. 14. An aggregate response of the strategy framework alignment with Strategy Implementation outcomes 188
Table.4.15.Measurement Model Assessment for Strategy management framework alignment with Implementation outcomes.....194
Table 4.16. CFA Overall Measurement Model Fit 194
Table 4.17: Structural Model Results: Hypothesis (H3) Testing 195
Table 4.18. Aggregate responses on CSFs influencing strategy implementation 205
Table.4.19 KMO and Bartlett's Test 211
Table 4.20 Total Variance Explained.....212
Table 4.21.Component Matrix.....213
Table 4.22 an aggregate responses of the practices of Monitoring and Evaluation 221
Table 4.23.Measurement Model Assessment for Monitoring &Evaluation (M&E) 225

Table 4.24: CFA Overall Measurement Model Fit 226
Table 4.25: Structural Model Results: Hypothesis Testing 227
Table 4.26: Internal challenges affecting adoption and implementation of SM practices 235
Table 4.27 an aggregate responses on external factors affecting SM practices 242

List of Figures

Figure: 1:1. Conceptual Framework for the Study 17
Figure 4.1 Path diagram of a structural Model: Environmental Scanning.....144
Figure 4.2 Path Diagram of Structural Equation Model: Strategy Formulation 159
Figure.4.3 Structural Equation Model: Strategy Implementation.....196
Figure 4.4 Scree plot 213
Figure.4.5 Path Diagram for Structural Equation Model 228
Figure 5.1. Proposed structural Model for SM practices in HEIs in Ethiopia.....240

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Strategic management has evolved from a planning-oriented concept into a dynamic discipline concerned with aligning organizational capabilities with environmental conditions to achieve sustained performance. Early definitions emphasized rational planning; however, later perspectives highlight both deliberate and emergent processes of strategy formation. For instance, Mintzberg (1994) conceptualizes strategy as a pattern in a stream of decisions, distinguishing between intended and emergent strategies. In public and nonprofit contexts, strategic management extends beyond competition to include mission fulfillment, stakeholder engagement, and public value creation (Bryson, 2018). Similarly, performance-oriented frameworks such as the Balanced Scorecard emphasize the translation of strategy into measurable outcomes across multiple dimensions (Kaplan & Norton, 1996). In addition, Srinivasan (2025) conceptualizes strategic management as both an art and science of developing, implementing, and evaluating cross-functional decisions to achieve organizational objectives, requiring both creativity and systematic analysis.

Building on this conceptual foundation, Strategic Management Practices (SMPs) refer to the operational mechanisms through which strategic management is implemented. These include environmental scanning, strategy formulation, resource allocation, strategy implementation, and monitoring and evaluation processes that enable organizations to translate strategic intent into measurable performance outcomes.

Historically, strategic management emerged in the private sector during the 1960s as a response to environmental uncertainty and competition. Its diffusion into the public sector during the late 1970s and 1980s was strongly influenced by New Public Management reforms, which promoted efficiency, accountability, and performance-oriented governance (Ferlie & Ongaro, 2022). However, the transfer of private-sector models into public institutions has been critiqued for underestimating contextual differences between sectors.

Within this public sector transformation, strategic management in higher education gained prominence from the 1980s onward in response to declining public funding, massification of enrollment, globalization, and technological change (Fumasoli & Hladchenko, 2024). In this context, strategic management in higher education refers to a systematic and continuous process through which universities define institutional direction, make long-term decisions, and align academic, administrative, and resource capacities to achieve mission-driven goals. Unlike profit-oriented organizations, universities prioritize academic excellence, research productivity, and societal contribution rather than financial returns.

Strategic management in higher education is also inherently stakeholder-driven and governance-intensive, as universities operate within multi-actor systems involving governments, academic staff, students, industry, and society. Consequently, strategic decisions require balancing institutional autonomy with accountability and academic values with managerial efficiency (Bryson, 2018). From a performance perspective, strategic management serves as a bridge between institutional planning and the achievement of efficiency and effectiveness outcomes.

Within this broader understanding, HEIs operate in complex environments shaped by regulatory frameworks, global competition, academic norms, and societal expectations. Therefore, strategic management in universities extends beyond planning and resource allocation to include governance complexity, academic mission differentiation, and knowledge production systems. Contemporary developments shaping this field include internationalization, digital transformation, performance-based funding, and global ranking systems. These developments have shifted universities from state-centered governance toward more decentralized and multi-actor systems (Regan & Brown, 2021). At the same time, universities face persistent challenges such as resource constraints, quality assurance pressures, and employability demands.

In this study, perceived efficiency and effectiveness are key constructs. Efficiency refers to the optimal use of institutional resources to achieve strategic objectives with minimal waste, while effectiveness refers to the extent to which universities achieve intended outcomes such as academic quality, research productivity, and stakeholder satisfaction. The term “perceived” reflects the subjective evaluations of institutional actors in addition to measurable performance indicators. Similarly, Comprehensive universities in Ethiopia represent a unique institutional

context, as they are predominantly third- and fourth-generation institutions established after 2012, which fully operate teaching, research, and community service functions (MoE, 2023).

Within this global context, the Ethiopian higher education system represents a distinctive case of rapid expansion and reform. Over the past three decades, the sector has evolved from an elite system with fewer than two public universities in the early 2000s to a rapidly expanded system comprising more than 50 public universities. This expansion has been driven by key national policy frameworks, including the Education and Training Policy, the Higher Education Proclamation No. 650/2009 &1152/ 2019, Education Sector Development Plans, and successive Growth and Transformation Plans, all of which emphasize access, equity, and human capital development.

Despite these achievements, the expansion has generated significant challenges, including resource constraints, governance inefficiencies, leadership capacity gaps, and quality assurance concerns (Teferra & Altbach, 2004; Tadesse, 2018; Abebe, 2019; Getachew, 2020). Evidence indicates that strategic management practices in Ethiopian HEIs are often compliance-driven rather than performance-oriented, with weak integration between planning and implementation and underdeveloped monitoring and evaluation systems. As a result, institutional strategies are not consistently translated into operational performance outcomes.

Although strategic management has been formally adopted across Ethiopian universities, existing studies have largely focused on planning and implementation processes (Assefa, 2015; Kifle, 2019; Ali & Mohan, 2021, Mekedas, 2019), with limited attention to performance outcomes such as efficiency and effectiveness. Consequently, there remains a clear empirical gap regarding how strategic management practices influence institutional performance in comprehensive universities.

Therefore, this study is positioned within the strategic management and higher education literature by examining the relationship between strategic management practices and perceived efficiency and effectiveness in Ethiopian comprehensive universities. By generating context-specific empirical evidence, the study aims to contribute to theory, inform policy reforms, and strengthen institutional performance in a rapidly expanding higher education system.

1.2. Statement of the Problem

Higher education institutions (HEIs) are currently operating in an environment marked by unprecedented transformation driven by globalization, digitalization, massification, shifting labor market demands, and increasing accountability pressures. Contemporary scholarship consistently positions universities not merely as academic communities, but as strategically managed organizations expected to demonstrate measurable efficiency and effectiveness in delivering educational, research, and societal outcomes (Fumasoli & Hladchenko, 2024; Jensen & Dikilitas, 2025; Kamara et al., 2024; Hashim et al., 2024). Leslie (2024) further highlights that HEIs are confronted with structural pressures including changing student demographics, declining funding, quality concerns, and growing public scrutiny. Collectively, these dynamics reflect a broader global shift toward performance-oriented and managerial governance regimes in higher education.

Within this context, Strategic Management Practices (SMPs) have emerged as central mechanisms through which HEIs are expected to navigate complexity and improve institutional performance. SMPs typically encompassing environmental scanning, strategy formulation, implementation, and monitoring and evaluation are theoretically designed to enhance alignment between institutional goals, internal capabilities, and external environmental demands (Ferlie & Ongaro, 2022; Perot, 2024; Srinivasan, 2025). From a normative perspective, SMPs are expected to improve efficiency through optimal resource utilization and enhance effectiveness through goal achievement, accountability, and continuous performance improvement (Sabattin et al., 2020; Kezar, 2001). However, despite their widespread adoption, the empirical relationship between strategic management and actual institutional performance remains contested.

A substantial body of literature indicates that a persistent implementation gap exists between formal strategic plans and realized organizational outcomes in higher education systems. Empirical studies suggest that while many universities adopt strategic planning frameworks, implementation is often partial, fragmented, or weakly integrated with monitoring systems (Birinci & Eren, 2013; McInerney, 2003; Kettunen, 2015). Abdrabou (2015) further demonstrates that such implementation weaknesses are more pronounced in developing-country contexts, where institutional capacity constraints, limited managerial competence, and weak accountability systems undermine effective strategy execution. Similarly, Akyel et al. (2012) and

Allison and Kaye (2005) argue that strategic management in public HEIs often remains procedural and compliance-oriented rather than performance-transformative. Importantly, much of this evidence relies on perceived effectiveness rather than independently measured organizational performance, which limits the strength of causal claims regarding SMPs and institutional outcomes.

To better explain this persistent gap, this study integrates Strategy Fit Theory, the Resource-Based View (RBV), and Institutional Theory, which together provide a multi-layered explanation of strategic management practice in HEIs. Strategy Fit Theory emphasizes that organizational performance depends on alignment between internal capabilities and external environmental conditions (Rolfe, 2003; Ferlie & Ongaro, 2022). RBV complements this by conceptualizing SMPs as organizational capabilities that enable the mobilization and deployment of valuable resources such as leadership competence, governance systems, human capital, and institutional knowledge to achieve sustained performance outcomes (Vuoris, 2016; Ferlie & Ongaro, 2022). Institutional Theory adds a critical explanatory dimension that is particularly relevant for higher education systems. It argues that organizations do not adopt strategic practices purely for efficiency reasons, but also to gain legitimacy, conform to normative expectations, and respond to coercive, mimetic, and normative institutional pressures (DiMaggio & Powell, 1983; Scott, 2014). This institutional perspective helps explain why many HEIs exhibit a decoupling between formal strategic structures and actual organizational behavior. In other words, universities may appear strategically compliant while simultaneously failing to translate plans into effective implementation and measurable performance improvements. This theoretical insight is consistent with empirical observations in higher education systems where strategic management practices are often symbolic, fragmented, or weakly institutionalized (Abdrabou, 2015; McInerney, 2003; Kettunen, 2015).

The relevance of this problem is particularly evident in Ethiopia, where higher education expansion has been accompanied by extensive reforms aimed at strengthening institutional performance. Government initiatives such as the Education Sector Development Programs (ESDPs), the Education Development Roadmap (2018–2030), and managerial tools including BPR, BSC, and KPIs were introduced to enhance planning, accountability, and performance management. However, despite these reforms, persistent structural and operational challenges

remain. The Education Development Roadmap (2018–2030:72) identifies limitations in strategic planning capacity, weak implementation systems, inadequate monitoring and evaluation, inefficient resource utilization, and leadership competency gaps. Similarly, Rossi (2020) and Kayyali (2025) highlight ongoing governance and accountability challenges, while Teshome (2003), Assefa (2014), and Kifle (2019) report misalignment between institutional outputs and national development needs.

From a Strategy Fit perspective, Ethiopian universities often experience misalignment between rapidly changing external demands such as labor market pressures, technological transformation, and accountability expectations and internal strategic responses. From an RBV perspective, although institutional resources have expanded significantly, limitations in managerial capability, coordination, and evaluation systems hinder their effective utilization. From an Institutional Theory perspective, many strategic management reforms may be implemented primarily to achieve legitimacy and policy compliance rather than to drive substantive organizational transformation, resulting in partial decoupling between formal structures and operational realities.

Accordingly, the central problem addressed in this study is not simply the existence of a general "strategy–outcome gap," but more precisely the limited empirical understanding of how strategic management practices (environmental scanning, strategy formulation, implementation, and monitoring and evaluation) influence objectively conceptualized organizational efficiency and effectiveness in Ethiopian comprehensive universities, within a context shaped simultaneously by capability constraints and institutional pressures. Existing research has not sufficiently disentangled whether observed performance limitations are driven by weak implementation capacity, misalignment of strategies, or institutional decoupling between formal systems and actual practices.

Research Gaps: Despite the growing body of literature on strategic management in higher education institutions (HEIs), important conceptual, methodological, and practical gaps/ limitations remain unresolved. These limitations collectively justify the need for further empirical investigation, particularly in developing-country university systems where strategic management reforms have been widely introduced but weakly evaluated in terms of actual performance outcomes.

Theoretical gap exists due to the fragmented application of dominant organizational theories in explaining strategic management performance. Strategy Fit Theory emphasizes alignment between strategy and environment (Ferlie & Ongaro, 2022; Rolfe, 2003), the Resource-Based View (RBV) focuses on internal resource utilization (Vuoris, 2016), while Institutional Theory highlights legitimacy pressures and the tendency for ceremonial adoption of formal structures (DiMaggio & Powell, 1983; Scott, 2014). However, these perspectives are rarely integrated or empirically tested together in higher education research. As a result, there is limited explanatory clarity on whether poor HEI performance is driven by misalignment, weak resource deployment, institutional decoupling, or their interaction.

Although recent studies in Ethiopian higher education have examined strategic leadership, strategy implementation, organizational performance, and strategic management practices (Dereb & Getahun, 2024; Edamo, 2024; Shamelo et al., 2025; Shanko et al., 2024), none of these studies specifically focused on assessing the perceived efficiency and effectiveness of strategic management practices in Ethiopian comprehensive universities. Moreover, previous studies largely emphasized isolated strategic dimensions rather than comprehensively examining environmental scanning, strategy formulation, strategy implementation, and monitoring and evaluation within a single framework. Therefore, this study seeks to fill this empirical and contextual gap in Ethiopian higher education research.

Methodological gap persists in the overreliance on perception-based measures of strategic management effectiveness. Most studies assess SMP outcomes through subjective views of administrators or staff, rather than objectively defined and theoretically grounded performance indicators. This weakens causal inference and obscures the distinction between perceived effectiveness and actual institutional performance, particularly in terms of efficiency (resource utilization) and effectiveness (goal attainment).

Practical gap remains in the persistent failure of many HEIs, especially in developing contexts, to translate formal strategic plans into measurable performance improvements. Empirical evidence shows that strategic management tools are often adopted in a procedural or symbolic manner, with weak implementation, monitoring, and feedback systems (McInerney, 2003; Abdrabou, 2015; Kettunen, 2015). In Ethiopia, despite reforms such as BPR, BSC, and KPIs, challenges persist in strategic implementation, resource utilization, and performance

improvement (Education Development Roadmap, (2018–2030), Rossi, 2020; Kifle, 2019). Therefore, this study addresses these interconnected gaps by examining SMPs through Strategy Fit Theory, RBV, and Institutional Theory using structured performance dimensions in Ethiopian comprehensive universities.

Likewise, the study is significant to multiple stakeholders. University leaders can use the findings to improve strategic alignment, implementation fidelity, and performance monitoring systems. Policymakers and the Ministry of Education may benefit in refining governance, accountability, and reform strategies. Academic and administrative staff can strengthen planning and execution practices, while students and society stand to benefit from improved institutional performance in terms of quality, efficiency, and relevance. At the theoretical level, the study contributes to advancing strategic management scholarship in higher education by integrating Strategy Fit Theory, RBV, and Institutional Theory in a developing-country empirical context.

In sum, this study is grounded in the argument that while strategic management has become institutionally entrenched in higher education systems, its actual contribution to measurable efficiency and effectiveness remains insufficiently understood. By empirically examining how SMPs interact with capability constraints and institutional pressures to influence performance outcomes, the study seeks to clarify whether strategic management in Ethiopian universities functions primarily as a transformative performance mechanism or as a partially decoupled institutional practice shaped by legitimacy demands.

1.3. Research Questions

This study aims at examining the efficiency and effectiveness of strategic management in public comprehensive universities; the following four basic research questions were formulated to address the problem.

RQ1: How do comprehensive universities in Ethiopia conduct environmental scanning, and how does this process influence the formulation of institutional strategies?

RQ2: How are strategies formulated in comprehensive universities in Ethiopia, and how do these formulation practices shape the perceived efficiency and effectiveness of strategy implementation?

RQ3:.How is strategies communicated in comprehensive universities in Ethiopia?

RQ4:What strategic management approaches are used to develop efficient and effective strategies in comprehensive universities in Ethiopia?

RQ5: To what extent is there alignment between strategic management frameworks and implementation outcomes in terms of perceived efficiency and effectiveness in comprehensive universities in Ethiopia?

RQ6.What critical success factors influence the successful implementation of strategic management practices in comprehensive universities in Ethiopia?

RQ7: How are strategic management practices monitored and evaluated in comprehensive universities, and how does monitoring and evaluation influence perceived efficiency and effectiveness?

RQ8: How do top management commitment and resource moderate the relationship between strategy implementation and organizational performance?

1.4. Hypothesis

For this study, the following explicit, theory-driven, and testable hypotheses connected with four fundamental strategic management themes were drawn.

H1a: Environmental scanning exerts a statistically significant positive influence on the perceived efficiency of strategic management practices in comprehensive universities in Ethiopia.

H1b: Environmental scanning demonstrates a statistically significant positive influence on the perceived effectiveness of strategic management practices in comprehensive universities in Ethiopia.

H2a: Strategy formulation exerts a statistically significant positive influence on the perceived efficiency of strategic management practices in comprehensive universities in Ethiopia.

H2b: Strategy formulation demonstrates a statistically significant positive influence on the perceived effectiveness of strategic management practices in comprehensive universities in Ethiopia.

H3a: Strategy implementation exerts a statistically significant positive influence on the perceived efficiency of strategic management practices in comprehensive universities in Ethiopia.

H3b: Strategy implementation demonstrates a statistically significant positive influence on the perceived effectiveness of strategic management practices in comprehensive universities in Ethiopia.

H4a: Monitoring and evaluation practices demonstrate a statistically significant positive influence on the perceived efficiency of strategic management practices in comprehensive universities in Ethiopia.

H4b: Monitoring and evaluation practices demonstrate a statistically significant positive influence on the perceived effectiveness of strategic management practices in comprehensive universities in Ethiopia.

H5: Strategic management practices exert a positive and significant overall influence on organizational performance, as evidenced by improvements in perceived efficiency and perceived effectiveness in comprehensive universities in Ethiopia.

1.5. The Objective of the Study

The general Objective of the study: To examine strategic management practices and their influence on perceived efficiency and effectiveness in comprehensive universities in Ethiopia with particular attention to their environmental scanning, strategy formulation, communication, strategy implementation, and monitoring and evaluation processes.

1.5.1. The Specific Objective of the Study

- To examine the efficiency and effectiveness of environmental scanning practices in Public comprehensive universities in Ethiopia.
- To examine how public comprehensive universities develop and analysis Strategies.
- To examine the extent of alignment between strategic management frameworks and their implementation outcomes in public comprehensive universities in Ethiopia.
- To examine how public comprehensive universities communicate Strategies
- To analyze the efficiency and effectiveness of the implementation of strategic management practices in Ethiopia's public comprehensive universities.
- To analyze the extent of the efficiency and effectiveness of the developed strategy in public comprehensive universities in Ethiopia.
- To investigate how public comprehensive universities monitor and evaluate the implementation of strategic management practices.
- To examine the moderating effect of resource availability and institutional constraints on strategy implementation outcomes.

1.6. Significance of the Study

In the higher education sector, strategic management is a comprehensive practice that guides how HEIs function and advance in order to successfully realize their institutional vision, mission, and goals. As a result, this study anticipated to have practical, theoretical, and policy significance.

Practical Significance*:* As stated in previous section, there is more literature on strategic management approaches in private/business sector than in the public sector in general, and HEIs in particular. Higher education sectors, on the other hand, are centers for the development of human capital, knowledge, and technology transfer, and they are now functioning in an era of globalization, digital transformation, and artificial intelligence, all of which necessitate interdependence, competition, effective communication and integration. Furthermore, public universities provide a rich research site, as there are still areas that need to be explored and investigated, particularly in terms of understanding the barriers to the efficiency and effectiveness of strategic management in the public sector (Ferile &Ongaro, 2022). These conditions have compelled institutions to explicitly examine and strategically think what and how such knowledge is acquired, as well as how it relates to the anticipated demands of their communities. Thus, practically, the study findings will assist university leaders and managers in identifying strategic management practices that most strongly influence performance. This can guide improvements in strategy formulation, implementation, and monitoring systems. Also, the study is expected can contribute comprehensive universities implement strategic management efficiently and effectively by raising awareness about how to identify problems through thorough environmental scanning, develop strategies to improve core functions of HEIs, implement the strategies, and monitor and evaluate their performance to navigate the efficiency and effectiveness of strategies.

Theoretical Significance: Jensen & Dikilitas (2025) argue that SM research on higher education involves a grasp of the institution's political, structural, environmental, and psychological dynamics. As far as I concern, no research has been undertaken on the efficiency and efficacy of strategic management practices in Ethiopian higher education institutions, mainly in comprehensive universities. Theoretically, therefore this study contributes to the strategic management and higher education literature by providing empirical evidence-based insights by

adding value to current knowledge on the relationship between SM practices and institutional efficiency and effectiveness in the Ethiopian higher education sector as well as performance outcomes in a developing-country context. It also extends existing models by simultaneously examining efficiency and effectiveness as distinct but related dimensions of performance.

Policy Significance: Educational Policymakers and researchers, particularly within the Ministry of Education, may utilize the results to refine guidelines, regulatory frameworks and support mechanisms for university governance and management. Additionally, the study can help as a reference for future scholars interested in strategic management and higher education performance in general, and. comprehensive universities in particular.

1.7. Scope of the Study

Conceptually, the study focuses on SM practices (environmental scanning, strategic planning, strategy implementation, and monitoring and evaluation) and their influence on perceived efficiency and effectiveness. In this study, the environmental scanning process was included because it serves as a lens to identify an organization's relevant environment to detect opportunities and threats affecting its performance by providing valuable insights and anticipating future influences in formulating efficient and effective strategies to navigate through uncertainty and capitalize on favorable circumstances). Geographically, the study is limited to selected eight comprehensive public universities in Ethiopia in order to make it manageable namely, Wachemo, Werabie, Selale, Bule hora, Odabultum, Madda walabu Mettu, and Gambella Universities.. In terms of respondents, the study targets academic and administrative staff involved in management and decision-making processes. Temporally, the study considers current practices and performance within the period of data collection. According to the organizational structure most of comprehensive universities have six different colleges: the Engineering and technology, Natural and computational science, Medicine and health sciences, Agriculture and veterinary science, Business and economic, College of education and behavioral studies ,and the Social sciences and humanities College, so among those colleges four colleges were selected and included in this study. Besides, strategic management practices was examined for all levels top, middle, and lower of the universities including academic and supportive staff members. More importantly, the study only emphasizes analyzing the efficiency and effectiveness of strategic management practices.

1.8. Limitations of the Study

The limitations of the study concerned with those features arise due to restrictions in different factors that will impact the understanding of the findings of the research or that will result unanticipated challenges during the study (James, 2004:66). Thus, this study was limited to the following factors.

Administrative Limitation: This study aims at analyzing the efficiency and effectiveness of SM practices in comprehensive universities in Ethiopia. Due to a number of factors, including fear, bureaucratic complexity, concerns regarding transparency, and other factors, some respondents did not cooperate with the study in order to provide complete and accurate information regarding the efficacy and efficiency of strategic management practices. To avoid doubts from respondents, confidentiality was assured and study objective was made clear. Furthermore, top-level management is extremely busy, which makes responding to interviews difficult. These were solved by using the drop-and-pick method for interviews and flexible working within their timelines. This approach allows management to participate in interviews at their convenience, accommodating their hectic schedules. By implementing flexible timing and a drop-and-pick method, the organization ensures that valuable insights are still gathered without overwhelming the executives. On the other hand, some of the participants from target universities may not have perfect and accurate knowledge about strategic management practices. This lack of comprehensive knowledge can further hinder the study's ability to gather reliable data, potentially skewing the results.

Conceptual limitations: The study is conceptually limited by its primary reliance on the Strategy Fit Theory, Resource-Based View and institutional theory, which emphasize internal capabilities (RBV) & environmental alignment (SFT), and capture the broader regulatory, normative, and coercive pressures(institutional theory) shaping university behavior the broader institutional and regulatory complexities influencing Ethiopian comprehensive universities. The conceptualization of strategic management practices is confined mainly to environmental scanning and strategy formulation, with limited integration of implementation, monitoring and evaluation. In addition, efficiency and effectiveness are measured through perceptual Likert-scale indicators rather than objective performance metrics, thereby reflecting perceived rather than actual institutional outcomes. The framework is also context-specific to comprehensive

universities operating under the governance structure of the Ministry of Education Ethiopia, which may constrain generalizability. Finally, the model assumes linear relationships and aggregates multidimensional constructs, potentially overlooking reciprocal dynamics and nuanced distinctions within institutional performance.

1.9. Delimitations of the study

The study is conceptually and contextually delimited. Conceptual and Contextual practices are most crucial subjects connected to SM practices of HEIs in Ethiopia. These practices involve understanding the theoretical frameworks and situational factors that influence decision-making and policy implementation within these institutions. By addressing both conceptual and contextual elements, higher education institutions can formulate more effective strategies to improve their operations and outcomes.

Conceptual Delimitation: This study is conceptually delimited to strategic management practices in Ethiopian public comprehensive universities. It excludes private institutions and other education sectors. Public comprehensive were chosen since they are one of the primary gateways via which highly educated and skilled labor enters various industries operating in the country. This necessitates strategically anticipating and addressing future human capital demands from companies and the market. In this sense, public HEIs are intended to deliver more demand-based knowledge and skills; increasing the value of the personnel they create (Tung and Aycan, 2018). Thus, conducting such research will enable universities to effectively evaluate and predict the existing and future needs of all national sectors awaiting their output. Furthermore, because institutions consume a greater share of public resources while providing a lower socioeconomic return to the public than less funded primary and secondary education (World Bank, 2004), conducting the study in this setting may help to improve the answerable returns as an opportunity cost for the rigorous investment made in running the comprehensive universities. As previously stated, Ethiopian public universities, like other institutions, import and adopt SM approaches developed specifically for use by profit-making private businesses in developed countries. Performing such a study is likely to contribute more value to accurately proving the viability of models in institutions where profit is less important than providing public service. This study pursues to analyze the applicability of SM models in the context of Ethiopian public universities, ensuring that the emphasis stays on improving public service rather than profit. It aims to align

these models with the specific goals and issues that Ethiopian educational institutions face. Public universities are included because a large number of students enroll, and so massive amounts of public funds (as shown above) have been capitalized to create and run Ethiopian public institutions in comparison to other universities in the country (MoE, 2016). As a result, doing research in public comprehensive universities would directly benefit a wider segment of the community in the country.

Contextual Delimitation: Contextually, this study was delimited by analyzing the efficiency and effectiveness of strategic management practices at Ethiopian comprehensive universities. Here, one question arises: "*Why comprehensive public universities?" "Why not others?"* MOSHE (2018) classified public universities into four groups (research, applied, comprehensive, and technology) based on their mission and areas of specialization, regardless of value or status, to address academic program difficulties and duplication while improving quality. To this purpose, 21 public institutions were classified as comprehensive universities, which focus on both teaching and research equally. According to MOSHE (2021) differentiation document, Adigrat, Bonga, Bule hora, Borena, Debark, Debre Tabor, Dembi Dollo, Gambella, Injibera, Jinka, Kebri Dahar, Madda Walabu, Mekdela Amba, Mettu, Mizan-Tepi, Oda Bultum, Raya, Selale, Wachemo, Werabie, and Woldia universities were categorized as comprehensive institutions. Thus, it is widely accepted that comprehensive public universities, as a collection of newly formed third- and fourth-generation universities that were established around 2012 G.C., with the exceptional case of Madda Walabu University, which was established in 2006 G.C., in Ethiopia, were chosen as a research site for the study for the following reasons. When compared to first- and second-generation universities, comprehensive universities have smaller sizes, fewer public resource allocations, less experienced academic and administrative staff profiles, and less experience with strategic management methods (Assefa 2014). Because of their recent start, newly established universities frequently lack a well-organized structure and staff capabilities of implementing strategic management practices efficiently and effectively.

Moreover, Mathooko & Ogutu (2014) suggested that the new established universities lack sufficiently documented data of SM practices in HEIs when compared to the older ones due to issues such as a lack of well-defined structure and stable responsible leaders working in them. Despite this, practically all comprehensive universities have developed three consecutive strategic plans, as well as ten- and five-year development plans, since their inception, thus they

are assumed to have substantial experience designing/developing strategies to meet organizational goals. As a result, it is necessary to investigate/analyze the efficiency and effectiveness with which comprehensive public universities in Ethiopia practice/implement strategic management. This study is crucial to identify gaps and opportunities for improvement in strategic management practices among these institutions. By doing so, it can help enrich their overall performance and adaptability in a rapidly changing educational landscape.

1.10. Definitions of Key Terms

Strategy is a broad plan or series of plans intended to gain a competitive edge by being different, giving a unique value added to the clients (students, employers, community etc.), having a clear and actionable view toward radical transformation, and establishing a new vision of the future over a lengthy period (Andrews, 2017).

Strategic management in higher education is a continuous, organization-wide process involving strategy formulation, implementation, and monitoring and evaluation, aimed at improving institutional performance (efficiency & effectiveness) in teaching, research, and community service. It involves aligning internal resources and capabilities with institutional goals to enhance efficiency and effectiveness in achieving mandated university functions (Henry, 2021).

Efficiency in higher education refers to the capability of universities to use limited resources (financial, human, information technology) effectively to deliver high-quality services. This is understood in two different ways. (1) The value-based approach, which focuses on the outcomes provided to end users, such as students, staff, the local community, and society as a whole, for the cost of the service. (2) The resource-oriented strategy, which emphasizes the activity's contribution to attaining the goal while reducing resource usage. It is also known as "doing things correctly" (Patel, 2021).

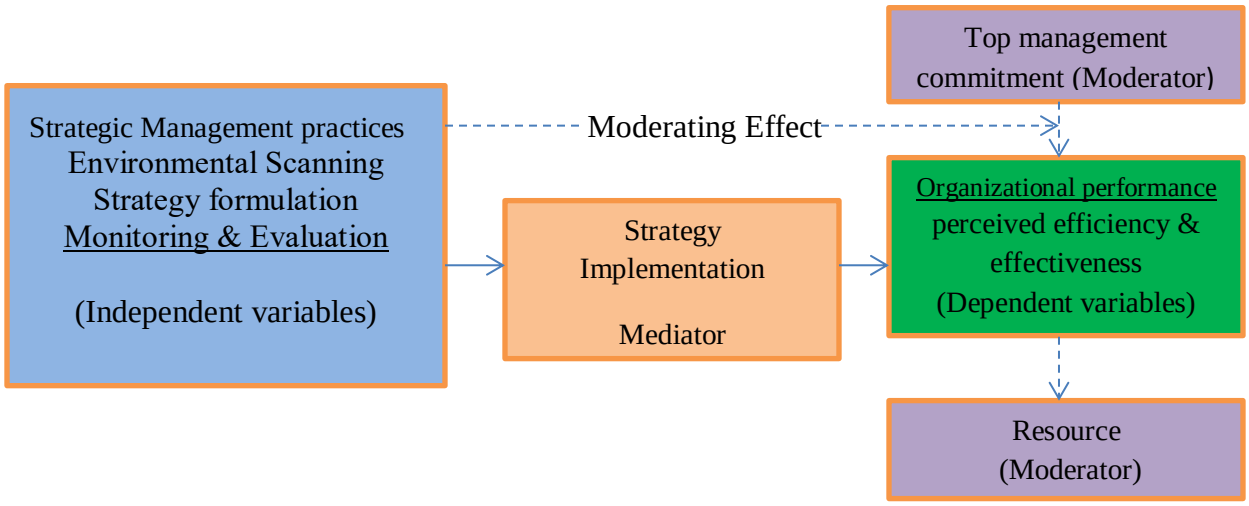
Effectiveness in HEIs emphasizes on achieving intended outcomes such as academic quality, research output, graduation rates, student satisfaction, and institutional reputation. This is measured to its stated mission and aims, which foster better outcomes and continued development. It is the ability to produce a desired output or to produce a desired result. Effectiveness in HE entails as an educational system's capacity to meet its declared educational goals. It is also known as doing the correct things (Patel, 2021).

Higher Education is a sector of education in which bachelors, masters and Ph.D. and masters' and 'degree programs students can pursue degrees in the arts, natural and social sciences, and technology via a variety of delivery methods (Proclamation No. 1152/2019).

***Comprehensive University*:** is an institution of higher learning committed to teaching, research and community engagement which engages in teaching as well as research with equal magnitude, involving PhD. masters' and bachelors 'degree programs (Differentiation, 2020)

1.11. Conceptual Framework of the Study

Figure: 1:1. Conceptual Framework for the Study



Source: *Adapted from Wheelen and Hunger (2012)*

Based on the review of relevant literature, this study conceptualizes strategic management practices as key determinants of organizational performance in higher education institutions. In this regard, environmental scanning, strategy formulation, and monitoring and evaluation are considered as major dimensions of strategic management practices that influence institutional outcomes.

Environmental scanning enables universities to systematically assess internal and external environments, thereby supporting informed strategic decision-making. Strategy formulation translates this environmental information into clear institutional strategies, objectives, and priorities. Monitoring and evaluation ensure continuous feedback, learning, and adjustment of strategic actions during implementation. Collectively, these practices provide a structured basis for enhancing organizational performance (David & David, 2020).

However, the study assumes that the influence of strategic management practices on organizational performance is not direct, but is transmitted through strategy implementation, which serves as a mediating variable. Strategy implementation refers to the process of translating formulated strategies into operational actions, resource allocation, and institutional practices. It is widely recognized in strategic management literature that even well-formulated strategies cannot improve performance unless they are effectively implemented (Hitt, Ireland, & Hoskisson, 2020).

In this study, organizational performance is operationalized in terms of efficiency and effectiveness. Efficiency refers to the optimal use of institutional resources to achieve desired outputs, while effectiveness refers to the extent to which institutional objectives and goals are achieved. These two dimensions provide a comprehensive measure of performance in higher education institutions.

Furthermore, the study considers top management commitment and resource as a contextual factor that influences the strength of the relationship between strategy implementation and organizational performance. Top management plays a critical role in providing leadership direction, mobilizing resources, ensuring coordination, and sustaining commitment during implementation. Accordingly, top management commitment is proposed to have a moderating effect, such that the relationship between strategy implementation and organizational performance (efficiency and effectiveness) becomes stronger when top management support is high (Kotter, 2012; Wheelen et al., 2018).

In summary, the conceptual framework proposes that environmental scanning, strategy formulation, and monitoring and evaluation influence organizational performance (efficiency and effectiveness) indirectly through strategy implementation, while top management commitment and support moderates the relationship between strategy implementation and performance. This integrated model provides a comprehensive explanation of how strategic processes and leadership commitment jointly determine performance outcomes in comprehensive universities.

1.12. Organization of the study

The dissertation comprises five chapters. The researcher sketches the introduction of the study in chapter one. The chapter gives an impression of the rationale of the study, research problem, and

states the main questions, objectives of the research and scope of the study and others. Chapter two outlines the theoretical and conceptual structure of the research. Also, it gives insight into the national policy context on the efficiency and effectiveness of the SM practices, opportunities and factors that affect SM practices in the eight public comprehensive HEIs. Chapter three explains on the research paradigm and research methodology of the study. Chapter four depicts on the information pinched from an analysis of comfortable evidences, questionnaires, interviews evidences from key informants and document analysis. Finally, Chapter five reviews and synthesizes the main findings and discusses the suggestions resulting from the result, conclusions and make recommendations based on the study. Likewise, lists of the references were arranged using the American psychological association (APA) style.

CHAPTER TWO

2. REVIEW OF THE RELATED LITERATURE

Introduction

This chapter addresses six themes. The first part of the chapter assesses the theoretical literature review on strategic management practices. It deals with assessing key attributes of strategic management, strategic management theories and approaches, models and tools for effective SM processes in the public sector and HEIs, and key success factors in SM practices in higher education. The second theme of the literature review addresses empirical studies on global and local SM practices in higher education. The third section of the chapter presents experiences of strategic management practices in HEIs from some select countries and lessons learned. The fourth part of the chapter elaborates on the history of HE development in Ethiopia, while the fifth subsection of the chapter depicts existing reform agendas in HEIs in Ethiopia to improve the governance of higher education. The last subsection of the chapter illustrates a summary of the chapter.

2.1. Theoretical Foundations: Competing and Complementary lenses

2.1.1. Defining Strategic Management: Core Concepts and Debates

Strategic management refers to the continuous and systematic process through which organizations formulate, implement, monitor, and evaluate strategies in order to achieve long-term goals, improve organizational performance, and sustains competitiveness within changing environments. Early strategic management scholars conceptualized it as a rational and formal planning process aimed at aligning organizational objectives with environmental opportunities and challenges. Ansoff (1965) defined strategic management as a systematic approach to organizational decision-making that enables institutions to adapt to environmental changes through strategic planning and resource allocation. Similarly, Porter (1980) emphasized that strategic management is concerned with creating competitive advantage by positioning organizations effectively within their external environment. Porter argued that organizations achieve superior performance when strategies are aligned with industry conditions, institutional capabilities, and competitive forces.

However, the concept of strategic management has evolved beyond formal planning perspectives. Mintzberg (1994) criticized overly rigid strategic planning models and argued that strategy should be understood as an emergent, dynamic, and practice-oriented process shaped by organizational learning, managerial actions, and environmental uncertainties. This debate created two dominant perspectives within strategic management theory: the prescriptive perspective, which views strategy as a deliberate and planned process, and the emergent perspective, which considers strategy as adaptive and continuously evolving. The debate remains central because organizations often combine formal strategic planning with flexible responses to changing environmental conditions.

Another important debate concerns whether organizational success is primarily determined by external environmental conditions or by internal institutional resources and capabilities. The Strategy Fit perspective emphasizes alignment between organizational strategies and environmental conditions (Porter, 1980), while Resource-Based Theory argues that sustainable performance depends mainly on valuable, rare, and inimitable organizational resources (Barney, 1991). In addition, Institutional Theory suggests that organizations adopt strategic management practices not only for efficiency but also to gain legitimacy and comply with institutional pressures and societal expectations (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). These competing yet complementary perspectives demonstrate that strategic management is multidimensional, involving environmental adaptation, resource mobilization, organizational learning, and institutional legitimacy.

In higher education institutions, strategic management has become increasingly important due to globalization, technological change, resource constraints, accountability demands, and policy reforms. Universities are therefore expected to formulate clear missions, align institutional resources, implement effective strategies, and continuously monitor and evaluate performance to enhance institutional effectiveness and sustainability. Consequently, strategic management is widely understood not merely as planning, but as an integrated managerial process that links vision, strategy formulation, implementation, monitoring, adaptation, and organizational performance.

2.1.2. Theoretical Foundation of the Study

Theory provides explanation, knowledge, and meaning to research by predicting facts, identifying untapped areas, and building frameworks to construct schools of thought and formulate ideologies. Gabriel (2015:173) asserts that theories are intended to challenge and incorporate existing knowledge while adhering to strict boundary expectations in order to explain, predict, and identify occurrences. It answers the question, "How does this theory shape the study?" Thus, a theoretical lens can be applied in defining the appropriate research design, formulating data gathering tools, and generalizing the results of the study in mixed research methods (Stewart & Klein, 2016; Giroux, 2023). Similarly, the significance of theories in mixed research encompasses elucidating epistemic attitudes, recognizing the rationale behind methodological decisions, testing and developing theory in response to study findings, and providing guidance as a study framework (Leeming, 2022).

In strategic management research, notable scholars such as Porter (1980), Mintzberg (1994), and Ansoff (1965) have made substantial contributions to the understanding of strategy and organizational performance. Porter (1980) emphasizes competitive positioning and the alignment between organizational strategy and the external environment in achieving institutional competitiveness and effectiveness. Mintzberg (1994) highlights the dynamic, emergent, and practice-oriented nature of strategy formulation and implementation processes within organizations. Likewise, Ansoff (1965) stresses the importance of strategic planning, environmental adaptation, and organizational growth for long-term institutional performance. These perspectives are relevant to higher education institutions because universities operate in dynamic environments that require strategic alignment, adaptability, and effective utilization of institutional resources.

Accordingly, this research was guided by three complementary theories, namely Strategy Fit Theory (SFT), Resource-Based Theory (RBT), and Institutional Theory, to establish a strong theoretical foundation for examining strategic management practices in comprehensive public universities in Ethiopia. *Strategy Fit Theory* explains that organizational effectiveness depends on the alignment between institutional strategies and internal and external environmental conditions. This argument is consistent with Michael Porter's emphasis on strategic fit and

competitiveness, which suggests that organizations achieve superior performance when strategies are aligned with environmental opportunities and challenges (Porter, 1980).

Resource-Based Theory (RBT), in contrast, emphasizes that valuable institutional resources and capabilities are critical determinants of sustainable performance and effectiveness (Barney, 1991). The theory highlights that resources such as skilled human capital, financial capacity, leadership competence, and organizational systems significantly influence institutional success. In Ethiopian universities, disparities in such resources affect the effectiveness of strategic management practices.

Institutional Theory further strengthens this study by explaining that organizational practices are shaped by institutional pressures, norms, and the need for legitimacy (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). The theory argues that organizations often adopt strategic practices not only for efficiency but also to comply with governmental regulations, professional standards, and societal expectations. In the Ethiopian higher education context, universities operate under strong policy reforms, accountability systems, and regulatory pressures that influence the adoption and implementation of strategic management practices.

Furthermore, Mintzberg's (1994) view of strategy as an evolving and practice-oriented process and Ansoff's (1965) emphasis on strategic planning and adaptation reinforce the theoretical relevance of examining strategic management practices in universities. Therefore, integrating SFT, RBT, and Institutional Theory with the contributions of Porter,(1980) Mintzberg(1994), and Ansoff,(1965) provides a comprehensive theoretical lens for analyzing the perceived efficiency and effectiveness of strategic management practices in Ethiopian comprehensive universities.

2.1.2.1. Strategic Fit Theory (SFT): Origins, Propositions, and Critiques

Strategic Fit Theory (SFT) is a major theory in strategic management that emphasizes the alignment between organizational internal capabilities and external environmental conditions. The theory argues that organizational efficiency and effectiveness are maximized when strategies, structures, resources, and processes are aligned with environmental opportunities, constraints, and institutional objectives. In higher education institutions (HEIs), strategic fit

highlights the need to align academic, administrative, and operational strategies with stakeholder expectations, government regulations, labor market demands, and global educational standards (Lawrence & Lorsch, 1967).

The theory originated from Contingency Theory, which argues that there is no universally superior strategy applicable to all organizations because performance depends on contextual and environmental conditions (Lawrence & Lorsch, 1967). Venkatraman & Camillus (1984) later formalized the concept of strategic fit in strategic management literature by emphasizing that organizational performance depends on the congruence between strategy and environmental realities. Similarly, Porter (1996) argued that sustainable performance results from the alignment of organizational activities and strategies to achieve competitive advantage. The theory later evolved into the concept of dynamic fit, which stresses continuous adaptation to changing institutional and environmental conditions.

SFT is built on four major principles: internal alignment, external alignment, dynamic fit, and performance maximization. Internal alignment requires organizational resources and structures to support strategic objectives, while external alignment emphasizes responsiveness to environmental opportunities and constraints. Dynamic fit highlights the need for continuous monitoring and adaptation, whereas performance maximization suggests that greater alignment improves organizational effectiveness and efficiency.

Despite its contributions, SFT has been criticized for overemphasizing environmental determinism and assuming that organizations must continuously adapt to external pressures while underestimating managerial innovation and institutional uniqueness. Critics also argue that achieving perfect alignment is unrealistic in dynamic and unpredictable environments, and that measuring "fit" remains conceptually difficult. Early versions of the theory were further criticized for being overly static and less capable of explaining innovation and transformational change.

Nevertheless, these criticisms strengthen the contemporary relevance of SFT by encouraging more adaptive and flexible interpretations of strategic alignment. In Ethiopian comprehensive universities, where institutions face policy reforms, technological changes, financial constraints, and accountability pressures, strategic fit remains highly relevant. Accordingly, this study applies

SFT to explain how environmental scanning, strategy formulation, strategy implementation, and monitoring and evaluation influence organizational efficiency and effectiveness through the alignment of institutional capabilities with environmental demands (Venkatraman & Camillus, 1984; Porter, 1996; Noble, 1999). In conclusion, Strategic Fit Theory provides a robust theoretical lens to explain how alignment between strategic management practices and organizational context enhances efficiency and effectiveness in higher education institutions, thereby underpinning the study's conceptual framework and guiding hypothesis development.

2.1.2.2. Resource-Based Theory/View (RBV): Origins, Propositions, Critiques

Resource-Based Theory/View (RBV), also linked with the Dynamic Capabilities perspective, explains that organizational success and sustainable competitive advantage depend largely on the possession and effective utilization of valuable, rare, inimitable, and non-substitutable (VRIN) resources. The theory was further advanced through the Dynamic Capabilities framework developed by Teece et al. (1997), which emphasized the ability of organizations to integrate, build, and reconfigure internal and external competencies in rapidly changing environments. RBV argues that institutions achieve superior performance when they effectively mobilize strategic resources and capabilities (Paauwe, 2024). In universities, such resources include qualified academic staff, research infrastructure, leadership competence, institutional reputation, technological systems, and organizational culture (Hitt, Ireland, & Hoskisson, 2017).

The theory further explains that strategic management practices play a critical role in identifying, developing, and deploying institutional resources to improve organizational performance (David & David, 2017). Environmental scanning helps institutions recognize internal strengths and weaknesses, while strategy formulation and implementation align resources with long-term institutional goals (Paauwe, 2024). RBV also emphasizes dynamic capabilities, arguing that organizations with stronger adaptive and innovative capabilities are more likely to achieve sustainable performance than those with limited capabilities (Paauwe, 2024). According to Zahra (2021) and Vasudevan (2021), dynamic capabilities enable organizations not only to utilize existing resources efficiently but also to explore new opportunities, modify institutional capacities, and respond effectively to environmental changes.

Despite its strong contributions, RBV has been criticized for overemphasizing internal organizational resources while giving insufficient attention to external environmental pressures, institutional regulations, and market dynamics. Critics also argue that concepts such as "valuable" and "rare" resources are difficult to measure objectively, making the theory methodologically challenging. Furthermore, some scholars contend that RBV tends to assume that resources automatically lead to superior performance, while overlooking leadership failures, weak implementation processes, and institutional constraints that may hinder effective resource utilization. The theory has also been criticized for being relatively static in its early formulations because it focused more on resource possession than on how organizations continuously adapt and transform capabilities in changing environments. The emergence of Dynamic Capabilities Theory addressed this limitation by emphasizing organizational learning, innovation, and adaptation (Teece et al., 1997).

Nevertheless, RBV remains highly relevant to this study because Ethiopian public universities operate under conditions of resource limitations, policy reforms, technological changes, and increasing accountability pressures. The theory provides a strong foundation for explaining how institutional resources, leadership capability, organizational culture, employee empowerment, and strategic management practices influence service delivery and organizational performance. In this context, strategy implementation depends on effective leadership, participatory management, staff development, organizational structure, and the institution's ability to manage environmental constraints (Malhotra et al., 2025). Accordingly, RBV justifies the argument that universities can improve efficiency and effectiveness when they strategically align institutional resources and capabilities with long-term strategic objectives and changing environmental demands. In conclusion, the Resource-Based View (RBV) provides a comprehensive theoretical lens to understand how internal resources and capabilities drive institutional performance and adaptability in Higher education institutions. The integration of Environmental Scanning, Strategy Formulation, Strategy Implementation, and Monitoring & Evaluation demonstrates that effective identification of environmental opportunities, strategic planning, execution of initiatives, and systematic evaluation are critical mechanisms through which unique organizational resources translate into organizational effectiveness (EFFI) and environmental fit effectiveness (EFFE) (Daft,2016)**.** These relationships highlight that sustained competitive advantage is achieved not merely by possessing resources but by strategically leveraging,

aligning, and continuously managing them in response to dynamic internal and external conditions

2.1.2.3. Institutional Theory: Origins, Propositions, Critiques

Institutional Theory explains that organizational behavior is shaped not only by internal resources and managerial decisions but also by the broader institutional environment in which organizations operate. The theory argues that organizations seek legitimacy, acceptance, and survival by conforming to established rules, norms, and societal expectations (Meyer & Rowan, 1977). Institutional environments include government agencies, regulatory bodies, accreditation systems, professional associations, and social norms that define acceptable organizational practices. DiMaggio and Powell (1983) further explained that organizations tend to become increasingly similar over time due to three forms of institutional pressures: coercive pressures arising from laws and governmental regulations, normative pressures stemming from professional standards and values, and mimetic pressures resulting from the imitation of successful organizations under conditions of uncertainty.

In higher education institutions, Institutional Theory is particularly relevant because universities operate within highly regulated and policy-driven environments. In the Ethiopian context, comprehensive universities are expected to comply with national education policies, quality assurance standards, strategic directives, and accountability systems established by government and regulatory agencies. Consequently, strategic management practices are influenced not only by internal efficiency and effectiveness considerations but also by the need to maintain institutional legitimacy and conformity with external expectations. The theory therefore explains why universities often adopt similar strategic planning, implementation, and monitoring practices despite differences in institutional resources and capabilities. It also helps explain why compliance with external requirements may sometimes receive greater emphasis than internal organizational effectiveness.

Despite its significant contributions, Institutional Theory has been criticized for overemphasizing conformity, stability, and environmental pressures while underestimating managerial agency, organizational innovation, and strategic uniqueness. Critics argue that the theory tends to portray organizations as passive actors responding to institutional demands rather than active institutions

capable of shaping their environments. In addition, the theory has been criticized for focusing more on organizational homogeneity than on institutional change, flexibility, and competitive differentiation. Nevertheless, these criticisms strengthen the importance of integrating Institutional Theory with other strategic management perspectives. Accordingly, in this study, Institutional Theory complements the Resource-Based View (RBV), which emphasizes internal resources, and capabilities, and Strategic Fit Theory (SFT), which focuses on the alignment between strategy and environment. Together, these theories provide a comprehensive theoretical foundation for understanding how strategic management practices are influenced by institutional pressures, internal capacities, and environmental alignment in Ethiopian comprehensive universities.

2.1.2.4. Justification for the study's Theoretical Framework

In this study, the selection of Strategic Fit Theory, Resource-Based View, and Institutional Theory is grounded in the multidimensional nature of strategic management practices in higher education institutions. Strategic management in universities cannot be adequately understood from a single theoretical lens because it involves the interaction of environmental alignment, internal resource capacity, and institutional pressures. Each theory therefore contributes a distinct but complementary explanatory role.

Strategic Fit Theory is included because it explains how organizational performance depends on the alignment between internal strategies and external environmental conditions. It provides a useful lens for understanding how universities align their strategic plans, structures, and processes with changing external demands such as government policies, stakeholder expectations, and labor market needs (Venkatraman & Camillus, 1984). However, while SFT emphasizes alignment, it does not fully explain why some universities are more capable than others in implementing strategies, particularly when they operate under similar environmental conditions.

To address this limitation, Resource-Based View is incorporated because it explains the role of internal institutional resources and capabilities in shaping strategic success. It argues that differences in performance among organizations are largely driven by the availability and effective use of valuable, rare, and inimitable resources such as leadership quality, human

capital, financial capacity, infrastructure, and organizational culture (Barney, 1991). In the context of universities, RBV helps to explain why some institutions are more effective in implementing strategic plans than others, even when they operate under similar external environments. However, RBV alone tends to underemphasize the influence of external institutional constraints and regulatory pressures.

Institutional Theory is therefore included to address this gap by explaining how organizational practices are shaped by external institutional environments. It emphasizes that universities do not operate in isolation; rather, they are influenced by coercive pressures from government regulations, normative pressures from professional standards, and mimetic pressures arising from the tendency to imitate successful institutions under uncertainty (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). In Ethiopian higher education institutions, strategic management practices are often shaped by compliance with national policies, accreditation requirements, and accountability frameworks, which makes Institutional Theory highly relevant for explaining similarities in organizational practices and the importance of legitimacy.

Taken together, the three theories provide a comprehensive and balanced analytical framework. Strategic Fit Theory explains environmental alignment, Resource-Based View explains internal capability differences, and Institutional Theory explains external legitimacy and conformity pressures. Their integration is necessary because strategic management in higher education is not determined by a single factor but by the interaction of internal resources, external environmental demands, and institutional pressures. Therefore, the combined use of these theories provides a stronger and more holistic foundation for analyzing the efficiency and effectiveness of strategic management practices in Ethiopian comprehensive universities.

2.2. Strategic Management in Higher Education: Global Context and Debates

Strategic management in higher education has become increasingly significant globally due to intensified competition, globalization, technological transformation, financial constraints, and growing demands for accountability and quality assurance. Universities are no longer viewed solely as academic institutions but as strategically managed organizations expected to demonstrate performance, efficiency, and societal impact. Consequently, strategic practices such

as strategic planning, environmental scanning, performance management, and continuous quality improvement have become central to university governance and institutional effectiveness.

From a global perspective, strategic management in higher education is shaped by both classical and contemporary theoretical debates. One dominant perspective emphasizes formal strategic planning and rational decision-making, where universities set long-term goals, align resources, and position themselves strategically within competitive environments. This view is grounded in classical strategic management thinking, particularly the work of Michael Porter, who emphasizes competitive positioning and strategic alignment for achieving sustained performance (Porter, 1980). Similarly, H. Igor Ansoff highlights systematic planning, environmental analysis, and strategic adaptation as essential for organizational success (Ansoff, 1965). From this perspective, universities are expected to operate as rational organizations that deliberately plan and manage their strategic direction.

However, this rational planning view has been widely debated. Henry Mintzberg challenges the assumption that strategy is purely deliberate and argues that in practice, strategy is often emergent, evolving through organizational learning, managerial behavior, and responses to uncertainty (Mintzberg, 1994). This critique is particularly relevant for higher education institutions, where rapid policy changes, shifting stakeholder demands, and unpredictable resource environments often limit the effectiveness of rigid long-term planning. As a result, many universities rely on adaptive and flexible strategic approaches rather than purely formal planning systems.

Another key global debate concerns the determinants of university performance. The environmental alignment perspective argues that institutional effectiveness depends on the fit between strategy and external conditions such as government policies, labor market needs, and global academic competition. In contrast, Resource-Based Theory emphasizes that performance is primarily driven by internal capabilities and strategic resources such as faculty quality, leadership, research capacity, and institutional culture (Barney, 1991). Complementing these views, Institutional Theory argues that universities are strongly influenced by coercive, normative, and mimetic pressures, leading to institutional similarity as organizations seek legitimacy and compliance with external expectations (DiMaggio & Powell, 1983; Meyer & Rowan, 1977).

Despite these contributions, contemporary debates highlight several tensions in higher education strategic management. These include the gap between strategic planning and implementation, the growing influence of global ranking systems that may encourage institutional homogenization, and the challenge of balancing efficiency with academic autonomy and innovation. Critics also argue that many universities face implementation constraints due to limited resources, governance challenges, and bureaucratic inefficiencies, which weaken the effectiveness of strategic plans in practice.

In developing countries such as Ethiopia, these global debates are particularly relevant because universities operate under strong governmental regulation, resource limitations, and increasing pressure to improve quality, accountability, and competitiveness. Therefore, understanding strategic management in Ethiopian comprehensive universities requires situating it within these global theoretical debates while also considering local institutional realities and constraints.

2.2.1. The Emergence of Strategic Management in Higher Education Institutions

Strategic management (SM) in higher education has emerged as a critical response to the increasing complexity, accountability demands, and competitive pressures facing universities globally. Universities, particularly public institutions, operate in a hybrid governance space where they must balance academic autonomy and collegial decision-making with strong external accountability requirements from governments, funding bodies, and society. In this context, strategic management provides a structured approach for aligning institutional missions with financial sustainability, operational efficiency, research productivity, intellectual development, and societal impact (Pearce & Robinson, 2013).

SM in HEIs is commonly conceptualized as a cyclical and continuous process that includes environmental analysis, strategy formulation, strategy implementation, and monitoring and evaluation (M&E). Environmental analysis involves assessing internal strengths and weaknesses alongside external opportunities and threats, often through tools such as SWOT analysis. Strategy formulation focuses on defining institutional vision, mission, objectives, and strategic action plans. Strategy implementation translates these plans into action through resource allocation and operational execution. Finally, monitoring and evaluation use key performance indicators (KPIs) and feedback mechanisms to assess performance, ensure accountability, and

support adaptive improvement in response to changing educational and societal demands (Hashim et al., 2024; Pearce & Robinson, 2013).

From a functional perspective, HEIs have four core responsibilities—teaching, research, learning, and community service all of which are expected to meet increasingly rigorous quality standards (Fumasoli & Hladchenko, 2021). Strategic management practices are therefore essential in ensuring that these core missions are effectively coordinated, resourced, and aligned with institutional priorities. SM also enhances knowledge production, optimizes resource utilization, strengthens institutional autonomy, and improves the relevance and quality of academic programs (Inga et al., 2021; Mohammed Hashim, 2022). In this sense, strategic management serves not only as an administrative tool but also as a governance mechanism that aligns institutional direction with broader societal development goals.

The literature consistently highlights several benefits of strategic management in higher education. These include improved educational quality, financial sustainability, institutional development, competitiveness, and stronger stakeholder engagement (Saifani et al., 2024; Wheelen & Hunger, 2012). Effective SM ensures coherence between strategy, structure, and processes, thereby enhancing organizational "fit" and overall institutional performance (Sawhney et al., 2017). The rationale for adopting SM in HEIs is therefore grounded in multiple objectives, including achieving institutional missions, improving academic reputation, optimizing scarce resources, meeting accreditation requirements, and responding to complex institutional challenges (David & David, 2016).

However, despite its benefits, strategic management in higher education is not without challenges. Globalization, technological transformation, changing labor market demands, and internal capacity limitations have made higher education governance increasingly complex. Weak strategic management systems and ineffective decision-making processes can significantly reduce institutional competitiveness and responsiveness at both national and global levels (Hashim, 2022). This has led to growing recognition that universities must strengthen their strategic capabilities to remain relevant and competitive in rapidly changing environments.

In response to these challenges, HEI leaders are expected to continuously evaluate the efficiency and effectiveness of strategic management practices, ensuring that institutional strategies remain

responsive to both internal capacities and external environmental conditions. This includes fostering market-oriented and student-centered education systems that enhance institutional responsiveness and performance (Saifani et al., 2024; Stukalina, 2014).

In the Ethiopian context, strategic management is strongly shaped by government policies, resource constraints, and institutional leadership capacity. Universities are required to align their strategic direction with national development priorities, quality assurance frameworks, and human capital development objectives. Effective strategic management in this context involves defining clear institutional visions, conducting systematic environmental analysis, implementing strategies effectively, and continuously evaluating outcomes. Regular performance reviews, reassessment of institutional goals, and strategic adjustments are essential for strengthening accountability and fostering shared understanding among academic and administrative stakeholders (Stukalina, 2014).

Overall, in developing countries such as Ethiopia, strategic management in higher education is not only an administrative necessity but also a developmental instrument. It requires long-term strategic vision, strong stakeholder engagement, and adaptive planning mechanisms to balance academic quality, administrative efficiency, and societal relevance. When effectively implemented, strategic management enhances institutional effectiveness and strengthens the contribution of universities to national development and societal transformation.

2.2.2. Core Components of Strategic Management in HEIs: A Synthetic Review

Strategic management in higher education institutions (HEIs) is widely understood as a systematic and continuous process through which organizations define what they aim to achieve (goals) and determine how those goals will be accomplished through structured actions, resource allocation, and performance control. In this regard, strategic management is commonly conceptualized as a cycle of interrelated processes rather than a single activity. In line with this understanding, Höglund et al. (2021) identify four core components of strategic management: environmental scanning, strategy formulation, strategy execution, and monitoring and evaluation. These components form a continuous and iterative system through which HEIs respond to internal and external demands, implement institutional strategies, and ensure accountability for performance outcomes.

2.2.2.1 Environmental Scanning

Environmental scanning is the foundational stage of strategic management and involves systematic monitoring and analysis of both internal and external environments to support informed decision-making. According to Höglund et al. (2021), it includes assessing internal strengths and weaknesses as well as external opportunities and threats. Internally, it focuses on institutional resources, capabilities, governance structures, and operational processes, while externally it examines political, economic, social, technological, and competitive conditions.

In HEIs, environmental scanning is critical because universities operate in dynamic and policy-sensitive environments. It enables institutions to identify emerging academic programs, funding opportunities, regulatory changes, and technological innovations. The core argument is that institutions that systematically scan their environment are better positioned to anticipate change, reduce uncertainty, and enhance strategic responsiveness. Therefore, environmental scanning is not merely a descriptive activity but a strategic intelligence function that informs all subsequent stages of strategic management.

2.2.2.2 Strategy Formulation

Strategy formulation refers to the process of defining institutional mission, vision, strategic objectives, and policy directions, as well as selecting appropriate strategies to achieve organizational goals (Fumasoli & Hladchenko, 2023; Mitchell, 2009). It also involves setting measurable targets, developing SMART objectives (Stukalina, 2017), prioritizing strategic actions, and allocating resources effectively (Heinzen et al., 2020). From a strategic management perspective, it is considered a key determinant of organizational competitiveness and long-term direction (Koontz & Weihrich, 2010).

In HEIs, strategy formulation is particularly complex because it requires balancing academic autonomy, stakeholder expectations, and governmental mandates. It involves participatory processes where key stakeholders contribute to shaping institutional direction. Poor strategy formulation often results in vague objectives, weak prioritization, and implementation failure, highlighting its critical role in institutional effectiveness.

Srinivasan (2025) further distinguishes formulation from implementation by emphasizing that formulation focuses on defining "where the institution is now and where it should be," while implementation focuses on "how to move from the current state to the desired future." In addition, Inga (2021) conceptualizes strategy formulation through key institutional questions such as mission definition, client identification, value creation, and strategic action choices. Similarly, Ferlie and Ongaro (2022) emphasize that formulation involves environmental scanning, mission development, objective setting, strategy selection, and resource allocation. Importantly, Srinivasan (2025) argues that effective execution depends heavily on the quality and clarity of the formulated strategy, reinforcing the interdependence between formulation and implementation.

2.2.2.3 Strategy Implementation

Strategy implementation refers to the process of translating formulated strategies into action through organizational structures, programs, budgets, and human resource systems (Höglund et al., 2021). It is widely recognized as the most challenging stage of strategic management because it determines whether strategic plans are effectively transformed into measurable outcomes.

In HEIs, implementation depends heavily on leadership commitment, staff engagement, communication systems, and resource availability. Weak implementation often creates a gap between strategic plans and actual institutional performance. Inga (2021) further conceptualizes implementation as a performance translation process in which strategies are converted into key performance indicators (KPIs) and cascaded across organizational units. Young (2015) adds that implementation depends on two key elements: organizational structure, which provides coordination and alignment, and managerial capabilities, which determine execution effectiveness.

Srinivasan (2025) also distinguishes two approaches to implementation: the factor-oriented approach, which views implementation as an interaction of multiple organizational factors, and the process-oriented approach, which views it as a step-by-step operational sequence. This highlights that implementation is both structural and behavioral, requiring alignment between systems, people, and processes.

2.2.2.4 Strategy Monitoring and Evaluation

Monitoring and evaluation constitute the final but continuous stage of strategic management, focusing on tracking progress and assessing the effectiveness of implemented strategies. These processes provide feedback for corrective action and institutional learning. According to Wheelen and Hunger (2012), strategy evaluation involves assessing whether strategies are achieving intended outcomes and determining necessary adjustments.

In HEIs, effective monitoring systems enable institutions to identify underperformance, improve accountability, and enhance learning. Weak monitoring systems, on the other hand, lead to poor accountability and limited institutional improvement. Bazargan et al. (2019) emphasize that monitoring and evaluation are essential for continuous improvement, performance review, flexibility, and feedback integration within strategic management systems. Therefore, monitoring and evaluation are not only control mechanisms but also learning tools that ensure strategic adaptability and institutional effectiveness.

Overall, these four components environmental scanning, strategy formulation, strategy implementation, and monitoring and evaluation are interdependent and form a continuous strategic cycle in HEIs. Their integration ensures that universities not only plan strategically but also execute, evaluate, and adapt their strategies in response to dynamic internal and external environments. Consequently, strategic management in higher education should be understood as a holistic and iterative process rather than a linear sequence of activities.

2.2.3. The Efficiency Construct in Higher Education: Measurement and Debates

Efficiency in higher education refers to the extent to which universities are able to convert inputs such as financial resources, academic staff, infrastructure, and time into desirable outputs such as graduates, research outputs, and community services with minimal waste. It is primarily concerned with input–output optimization, cost-effectiveness, process coordination and standardization; reduce operational wastes and productivity in institutional operations. In this sense, efficiency reflects how well higher education institutions (HEIs) utilize scarce resources to achieve maximum academic and administrative output.

In measurement terms, efficiency in HEIs is commonly assessed using quantitative performance indicators such as student–staff ratios, graduation rates, research productivity per faculty member, budget utilization rates, and time-to-graduation. Recent studies also emphasize the use of performance management systems and key performance indicators (KPIs) to evaluate institutional efficiency in a more structured and comparable way (De Witte & López-Torres, 2017; Johnes et al., 2020). However, despite these measurement tools, there is ongoing debate about whether efficiency in higher education can be fully captured using purely quantitative indicators, given the complex and multidimensional nature of universities.

A major debate in the literature concerns whether efficiency in HEIs should be understood in economic terms or academic terms. The economic perspective emphasizes cost minimization and productivity maximization, while the academic perspective argues that efficiency must also consider educational quality, knowledge creation, and long-term intellectual development. Critics argue that overemphasis on efficiency risks turning universities into "production-oriented" institutions, potentially undermining academic freedom and educational quality (Jongbloed et al., 2018). Therefore, efficiency in higher education is increasingly viewed as a balanced construct that integrates financial discipline with academic excellence and institutional sustainability.

2.2.4. The Effectiveness Construct in Higher Education: Stakeholder Perspectives

Effectiveness in higher education refers to the extent to which universities achieve their intended goals and fulfill their institutional missions. Unlike efficiency, which focuses on resource utilization, effectiveness focuses on student success, goal attainment, quality outcomes, and stakeholder satisfaction, and institutional competiveness. It is inherently multidimensional because universities serve diverse stakeholders with different expectations and value systems.

From a stakeholder perspective, effectiveness is interpreted differently depending on institutional actors. For students, effectiveness is reflected in quality teaching, employability, and learning outcomes. For academic staff, it relates to research opportunities, academic freedom, and professional development. For governments, effectiveness is measured through accountability, national development contribution, and policy compliance. For society at large, it is reflected in

community engagement, knowledge transfer, and social impact (Marginson, 2016; Krücken, 2021).

This diversity of expectations creates a conceptual challenge in defining and measuring effectiveness in HEIs. Recent scholarship emphasizes that effectiveness should not be viewed as a single universal standard but as a multi-stakeholder construct shaped by competing institutional logics (Meyer & Höllerer, 2020). As a result, universities often face tensions between academic values and managerial accountability, particularly when performance indicators are used to assess institutional success. Furthermore, debates in higher education research highlight the tension between performance-based accountability systems and academic autonomy**.** While accountability frameworks improve transparency and comparability, critics argue that they may lead to standardization and "teaching to the metric," which can distort institutional priorities (Hazelkorn, 2015). Therefore, effectiveness in higher education is increasingly understood as a negotiated and context-dependent construct rather than a purely technical outcome.

In summary, efficiency and effectiveness represent two interrelated but conceptually distinct constructs in higher education. Efficiency focuses on optimizing resource use and minimizing waste, while effectiveness emphasizes goal achievement and stakeholder satisfaction. However, both constructs are contested in the literature due to the complexity of university missions and the diversity of stakeholder expectations. Contemporary debates therefore call for integrated approaches that balance economic efficiency with academic quality and social relevance, ensuring that universities remain both productive and meaningful institutions in society.

2.2.5. Critical Success Factors for Strategic management practices in HEIs

Carefully looking at institution's internal and external situation is necessary for strategic management in order to achieve the organization's objectives within a certain time frame. To guarantee increased production and accomplish their objectives, organizations develop and put into action plans. At HEIs, strategic decision-making is becoming more and more connected to innovation, competitive advantage, success, and excellence (Toshov, 2024). According to Toshov (2024), competitiveness, acquaintance to new chances, teamwork, fund raising, dynamic leadership, reward, excellence, and training are the main factors that emphasize the traits that HEIs use to show their success. Also, Zerafati & Hosseinpour (2024) cited that Supportive

organizational culture, dynamic leadership, ongoing training and improvement, information technology, senior management support, reward and motivation, flexible organizational structure, and the efficacy of institutional governance as critical success factors in HEIs.

Baltabayeva, et.al, (2020) proposed the significance of a supportive strategic culture in HEIs in addition to the existing culture as a success factor in university strategic planning. Comprehending the diverse academic cultures in universities is essential, and higher education institutions should first understand their organizational structure and cultures by associating academic culture with a variety of cultures, including collegial, bureaucratic, political, and organized anarchy. Thus, universities should evaluate their current unique cultures before strategy formulation, which includes relationships collaboration with external stakeholders, effective leadership, participation of staff in the strategy formulation & implementation, provision for advancement, and designation of clear accountability for anticipated outcomes. Finally, Yu (2021) suggested four common elements of successful strategies that are frequently observed in organizations, including development goals that are simple, reliable, and long-term; a thoughtful understanding of the development issues and competitive setting; guideline assessment of resources; and effective application. These effective success strategies used to boost organizational development. The institutions should establish values of simplicity and consistency, as well as long-term development goals. In addition, there should be a thorough awareness of the development issues and competitive landscape and a guideline for the resources usage. The absence of any one of these elements can't constitute a complete strategy. As a result, just as armies require plans, HEIs require organizational strategies that provide direction and purpose in order to deploy resources efficiently and coordinate top management choices.

2.3. Strategic Management in Developing Country Higher Education: The Ethiopian Context

Strategic management in higher education within developing countries is shaped by resource constraints, rapid expansion, governance challenges, and strong state involvement. Unlike in many developed systems where universities enjoy high institutional autonomy, higher education institutions (HEIs) in developing countries often operate under centralized planning and strict regulatory oversight. As a result, strategic management practices tend to emphasize compliance, policy alignment, and administrative control rather than autonomous strategic positioning.

Recent studies indicate that in such contexts, strategic management is often "policy-driven" rather than "strategy-driven," limiting institutional flexibility and innovation (Varghese, 2021; Tilak, 2023). In Ethiopia, this pattern is particularly pronounced due to strong governmental steering of the higher education system.

2.3.1. Historical Trajectory of Ethiopian Higher Education

The development of higher education in Ethiopia has undergone several distinct historical phases shaped by political, economic, and policy transformations. Modern higher education in Ethiopia began in 1950 with the establishment of Addis Ababa University, which laid the foundation for the country's contemporary higher education system. Prior to this, higher learning was mainly delivered through traditional religious institutions, particularly the Orthodox Church and Islamic education systems, which primarily focused on theological and cultural instruction rather than modern scientific and professional training (Asgedom & Hagos, 2015; Wagaw, 1990).

The establishment of the University College of Addis Ababa in 1950 marked the beginning of secular, modern higher education in Ethiopia and initiated the transformation toward a formal higher education system (Asgedom & Hagos, 2015). At this early stage, higher education was highly elitist, characterized by extremely limited access and strong external influence in curriculum design and institutional governance.

During the socialist regime (1974–1991), the higher education system was centralized and heavily politicized, with limited institutional autonomy and strong state control over academic programs and governance structures. After 1991, major reforms were introduced that expanded access and initiated rapid institutional growth. Since the early 2000s, Ethiopia has adopted an expansion-oriented higher education policy, resulting in the establishment of numerous public universities across the country (Teshome, 2020; Ashcroft & Rayner, 2018).

This expansion has been one of the most significant transformations in the sector. Over the past three decades the number of public universities increased from two to fifty, accompanied by a dramatic rise in student enrollment (Trow, 2006). For example, Addis Ababa University enrolled about 4,500 students in 1970 (Saint, 2004), whereas recent figures indicate that approximately 875,000 students are currently enrolled in public and private higher education institutions,

corresponding to a gross enrollment ratio of about 13.8%, which remains below the national target of 18% (MoE, 2022; MoSHE, 2019). To support this expansion, the government allocates more than 40% of its annual education budget to higher education, reflecting substantial public investment in infrastructure, staffing, and institutional development (Raynor & Ashcroft, 2011; UNESCO, 2015; MoSHE, 2021).

Despite this rapid expansion, the Ethiopian higher education system continues to face significant structural and operational challenges. Persistent issues include concerns about program relevance, declining quality of teaching and research, inadequate infrastructure, limited technological capacity, and weak graduate employability (MoSHE, 2019). In addition, governance structures in higher education institutions have been strained by rapid massification, limited funding, shortages of qualified academic staff, and increasing administrative complexity. As a result, many universities operate in a dynamic and resource-constrained environment that demands more effective management and governance systems.

These challenges are further intensified by national development ambitions. Ethiopia's goal of becoming a middle-income country by 2030 places higher education at the center of human capital development, poverty reduction, and economic transformation (World Bank, 2008). The transition from an agriculture-based to an industry-driven economy requires universities to produce skilled graduates capable of driving innovation and productivity. However, this expansion has also introduced additional pressures on universities, including increased student diversity, changing funding structures, stronger accountability demands, and expectations for global academic integration and collaboration (Teshome, 2003).

Given these complex conditions, strategic management has become increasingly relevant for Ethiopian higher education institutions. It provides a structured framework for aligning institutional missions with environmental demands, improving resource utilization, and enhancing organizational performance (David, 2011). Through strategic management, universities can revise mission statements, strengthen accountability systems, evaluate funding effectiveness, and respond more effectively to both national priorities and global academic standards.

However, despite the importance of strategic management in addressing these challenges, empirical evidence suggests that its implementation in Ethiopian universities remains weak and inconsistent. This indicates a gap between policy intentions and institutional practice, highlighting the need for further investigation into how strategic management is understood and implemented within the sector. Accordingly, this study examines strategic management practices and associated challenges in selected Ethiopian public comprehensive universities, with the aim of contributing to improved institutional effectiveness, governance, and performance in a rapidly evolving higher education environment.

2.3.2. Quantitative Overview: Access, Resources, and Outcomes

Ethiopian higher education has experienced dramatic expansion in student enrollment, institutional numbers, and program offerings. Access has increased significantly due to massification policies, particularly in undergraduate education. However, this expansion has not been matched with proportional growth in academic staff, infrastructure, or research capacity.

Empirical studies show that student–staff ratios remain high, infrastructure development is uneven, and research output is relatively low compared to international benchmarks (World Bank, 2022; MoE Ethiopia, 2023). Graduate employability and labor market alignment also remain key concerns, indicating gaps between expansion and quality outcomes. Thus, while access has improved, efficiency and effectiveness challenges persist, highlighting the need for stronger strategic management systems to balance growth with quality assurance.

2.3.3. Policy Framework Evolution: From Compliance to Strategic Management

The Ethiopian higher education policy framework has evolved from a centralized compliance-based system toward a more strategic orientation. Early reforms focused on standardization, expansion, and regulatory control. However, recent policy directions emphasize institutional autonomy, quality assurance, and performance-based management. The introduction of national strategies such as Education sector development programs (I-VI), the Higher Education Proclamation No.650/2009 & 1152/2019, Education Roadmaps, Modularization, and curriculum harmonization (2018-2030) reflects an attempt to shift from strict compliance toward strategic institutional governance. Despite this shift, evidence suggests that implementation remains largely compliance-driven, with universities still heavily dependent on directives from the

Ministry of Education (MoE Ethiopia, 2023; Tilak, 2023). This creates a tension between intended strategic autonomy and actual operational control.

2.3.4. University Differentiation: Comprehensive University as a Category

University differentiation refers to the process by which higher education systems classify and assign distinct missions, roles, and functions to universities in order to reduce institutional duplication, improve system efficiency, and enhance quality and relevance. It is a policy and governance strategy that moves higher education systems away from uniform institutional models toward specialized or mission-diversified universities based on capacity, mandate, and national development priorities (Reale & Seeber, 2019; Kwiek, 2021).

In differentiated higher education systems, universities are typically assigned distinct roles such as research-intensive universities, teaching-oriented institutions, applied universities, and comprehensive universities. This differentiation is intended to strengthen institutional focus, improve resource allocation, and enhance system-level performance by ensuring that each institution develops expertise aligned with its mission rather than attempting to perform all functions equally (Kwiek, 2021; OECD, 2023).

Recent literature emphasizes that university differentiation is closely linked to massification and expansion of higher education, which often leads to institutional homogeneity if not properly managed. Differentiation therefore serves as a strategic governance mechanism to balance expansion with quality assurance, innovation, and efficiency. However, scholars also caution that excessive standardization or weak implementation may result in "formal differentiation," where institutions are categorized differently on paper but continue to operate similarly in practice (Marginson, 2016; Krücken, 2021).

Ethiopian higher education has introduced a structured system of institutional differentiation into five category named as research, applied, comprehensive, technology, and education universities aimed at addressing mission redundancy, improving quality, and enhancing system efficiency. Within this framework, Ethiopia has 21 comprehensive universities. These institutions are defined as higher education entities mandated to offer a wide range of academic programs across multiple disciplines while simultaneously integrating their core functions of teaching, research,

and community service. These universities are expected to serve multiple national development priorities across disciplines.

However, empirical and policy discussions indicate that most comprehensive universities in Ethiopia face persistent challenges related to limited specialization, uneven institutional capacity, and significant resource constraints across academic units. These structural limitations weaken institutional differentiation and reduce competitiveness, as universities tend to adopt similar organizational structures and strategic behaviors regardless of their contextual differences. This has contributed to institutional isomorphism, where organizations increasingly resemble one another rather than developing distinctive strategic identities (Clark, 2019; Krücken, 2021).

To address these challenges, the Ethiopian government has pursued higher education transformation through policy reforms such as the Education and Training Roadmap (2018–2030). This policy emphasizes the need to differentiate universities based on mission and capacity, moving away from long-standing disciplinary overlap and institutional redundancy. The reform agenda categorizes public universities into research universities, applied universities, comprehensive universities, and technology universities, based on their strategic focus areas and institutional roles. International benchmarking tools such as the U-Multirank system and Scopus-based publication indicators have also been adapted to support this classification.

The primary objective of differentiation is to improve teaching and learning quality, strengthen institutional focus, enhance program relevance, and promote innovation. Although implementation is still in its early stages, universities have begun identifying priority areas and aligning their strategic directions accordingly, indicating a gradual transition toward mission-based institutional positioning.

2.3.5. University Autonomy: Dimensions, Global Perspective, and Ethiopian Context

University autonomy refers to the degree of independence that higher education institutions (HEIs) have to govern their academic, administrative, financial, and staffing affairs without undue external interference, particularly from the state or political authorities. It is a central principle of modern higher education governance because it enables universities to safeguard

academic freedom, enhance institutional responsiveness, and improve performance in teaching, research, and community engagement (Estermann et al., 2011; Eurydice, 2020).

Conceptually, university autonomy is commonly analyzed across four key dimensions. Academic autonomy refers to the freedom to design curricula, teaching methods, and research agendas. Organizational autonomy involves the authority to determine internal governance structures and administrative arrangements. Financial autonomy relates to the ability to manage budgets, generate revenue, and allocate resources independently. Staff autonomy concerns decision-making power over recruitment, promotion, remuneration, and academic staffing policies.

Globally, the degree of university autonomy varies significantly across regions. In some contexts, such as parts of Latin America, autonomy is constitutionally protected due to historical struggles for academic freedom and institutional independence. In contrast, in many developing countries, universities operate under strong governmental oversight, with limited autonomy in financial and academic decision-making.

In Ethiopia, university autonomy has been a long-standing policy aspiration but has faced implementation challenges due to centralized governance traditions and regulatory constraints. Recently, progress has been made with the recognition of Addis Ababa University as an autonomous university by the Council of Ministers. In addition, the Ministry of Education is working toward granting autonomy to several other selected universities in phases.

The policy expectation is that increased autonomy will enhance institutional innovation, academic freedom, and efficiency while also strengthening community engagement and societal contribution. However, autonomy also introduces governance challenges, requiring robust accountability systems to ensure alignment between institutional freedom and public responsibility. Therefore, effective autonomy in Ethiopian higher education depends on balancing institutional independence with strong performance monitoring and accountability frameworks.

2.3.6. Key Performance Indicators (KPIs) for Performance Evaluation in HEIs

Key Performance Indicators (KPIs) are widely used as quantitative measures to assess institutional performance and determine the extent to which higher education institutions are achieving their strategic objectives. According to Badawy et al. (2018), KPIs represent measurable values that reflect organizational effectiveness and provide evidence of progress toward defined goals. In higher education, KPIs are increasingly used by both the Ministry of Education and universities to monitor performance, enhance accountability, and improve institutional quality.

In the Ethiopian context, the Ministry of Education has developed a comprehensive KPI framework consisting of 56 indicators organized into 12 thematic areas, aligned with national strategic documents such as the 10-year development plan, ESDP-VI, and the Education Development Roadmap. This initiative represents a significant step toward institutionalizing performance-based management in higher education. Despite these developments, a major challenge remains in selecting appropriate and context-relevant indicators that accurately reflect the realities of Ethiopian universities. Equally important is the challenge of measuring, interpreting, and effectively using KPI results for decision-making and institutional improvement. Without proper contextualization, KPIs risk becoming procedural tools rather than meaningful performance management instruments.

The introduction of KPIs is expected to strengthen performance evaluation systems, improve educational quality, enhance accountability to government and society, and promote institutional productivity. It also creates a foundation for potential performance-based funding mechanisms in the future. Moreover, KPIs are increasingly viewed as essential tools for aligning institutional missions and strategic objectives with measurable outcomes across academic, administrative, and managerial domains. For KPIs to be effective in Ethiopian higher education, it is recommended that they align closely with intended learning outcomes, including intellectual development, professional competencies, transferable skills, and practical capabilities. They should also reflect the performance of students, academic staff, support staff, and institutional leadership to ensure a comprehensive evaluation of university effectiveness.

2.3.7. Empirical Evidence on Strategic Management in Ethiopian Universities

Empirical studies on strategic management (SM) practices in Ethiopian universities generally reveal that while strategic planning is widely institutionalized, its implementation, monitoring, and evaluation remain weak and inconsistent. Most universities formally develop strategic plans, but significant gaps persist between planning and execution, largely due to limited capacity, weak coordination, and institutional constraints (Fenta et al., 2022; Ayalew, 2021).

Using a mixed-method approach, Assefa (2015) examined strategic planning and implementation practices in Ethiopian public universities and found that communication among staff was ineffective and insufficient attention was given to environmental scanning during planning processes. The study further revealed misalignment between strategic plan objectives and actual institutional priorities, indicating weak integration between formulation and implementation.

Similarly, Bassa (2015) investigated the relationship between strategic planning and strategy implementation in Ethiopian public universities and found a significant relationship between planning quality, implementation effectiveness, and institutional performance. However, the study also highlighted persistent implementation challenges that limited the realization of strategic objectives. Nigist et al. (2018), in their study on the Balanced Scorecard (BSC) as a strategic management tool in Ethiopian public higher education institutions, found that the BSC framework was not fully implemented and was only partially applied in selected universities. The study emphasized weak institutionalization of performance measurement systems and limited integration of strategic indicators into daily operations. In another study, Kifle (2019) examined strategic planning formulation and implementation in Ethiopian first-generation public universities and found that strategic activities were not effectively linked across past, present, and future institutional states. The study concluded that weak integration between planning and implementation processes undermined institutional effectiveness. Ali and Mohan (2021) studied strategic management practices and challenges in Ethiopian public higher education institutions and found that attempts to institutionalize strategic management were insufficient. The study identified leadership gaps, weak awareness of strategic processes, and limited institutional commitment as key barriers to effective implementation.

Furthermore, a quantitative study by Mesfin (2022) on strategy implementation in Ethiopian institutions highlighted major challenges such as poor leadership, weak communication systems, lack of employee ownership, and inadequate organizational structures, all of which negatively affected strategy execution. Additional empirical evidence from higher education studies consistently confirms that leadership capacity limitations, resource constraints, and bureaucratic inefficiencies significantly affect strategic management effectiveness. Across studies, strategic planning is often found to be compliance-oriented rather than performance-driven, with weak monitoring and evaluation systems and limited stakeholder engagement (Fenta et al., 2022; Ayalew, 2021). Overall, the empirical literature on Ethiopian universities consistently indicates that although strategic management practices are formally established, their implementation remains weak and fragmented. The persistent gap between strategy formulation and execution suggests that strategic management is still evolving from a procedural requirement into a fully functional management system within Ethiopian higher education institutions.

2.3.8. The Compliance Trap: How Ministry Oversight Shapes Strategic Behavior

A major structural issue in Ethiopian higher education is what can be described as a "compliance trap." Universities are required to align closely with directives from the Ministry of Education and other regulatory bodies, which shapes strategic behavior toward conformity rather than innovation. This strong external control leads to institutional isomorphism, where universities adopt similar strategic plans, structures, and performance systems regardless of contextual differences. While this ensures national alignment and accountability, it often limits institutional creativity, responsiveness, and strategic differentiation (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Krücken, 2021). As a result, strategic management becomes more about fulfilling external requirements than developing internally driven strategic capabilities.

2.3.9. Identified Gaps in the Ethiopian Literature

Despite growing research on higher education in Ethiopia, several gaps remain in the strategic management literature. First, most studies are descriptive and focus on planning rather than execution, leaving limited understanding of implementation dynamics. Second, there is a lack of integrated theoretical application combining Strategic Fit Theory, Resource-Based View, and Institutional Theory in explaining strategic management practices. Third, empirical evidence on

how strategic management influences efficiency and effectiveness outcomes in Ethiopian universities remains limited. Fourth, stakeholder-based evaluations of strategic effectiveness are underexplored, particularly in relation to students, academic staff, and government agencies. Finally, there is limited longitudinal research examining how strategic management practices evolve over time in response to policy reforms and institutional changes. Addressing these gaps is essential for improving both theoretical understanding and practical effectiveness of strategic management in Ethiopian higher education.

2.4. Comparative Perspective: Sectorial Analysis of SM in Ethiopian HEIs

This study adopts a sectorial comparative perspective to examine strategic management practices in Ethiopian higher education institutions, with a specific focus on public and private universities. The comparison is intentionally confined to a single national context, rather than extending to cross-national analysis, because all institutions operate within the same higher education policy and regulatory framework. This makes institutional ownership public versus private a meaningful and analytically useful basis for identifying variation in strategic management practices.

Within this framework, public universities are characterized by strong state involvement in governance, relatively standardized planning systems, and dependence on government funding. These conditions often shape strategic management practices through formal procedures, hierarchical decision-making structures, and alignment with national development priorities. In contrast, private universities tend to operate with greater managerial autonomy, more flexible internal decision-making structures, and stronger responsiveness to market and student demand. Their reliance on tuition-based financing also influences how strategies are formulated, implemented, and evaluated.

The comparison between these two sectors is therefore grounded in the assumption that institutional structure and ownership shape how strategic management is practiced. Differences in autonomy, accountability mechanisms, and resource availability are expected to influence how institutions design and execute their strategic plans, how leadership is exercised, and how monitoring and evaluation systems are implemented. In this sense, the study uses the public–

private distinction not merely as a descriptive classification but as an analytical lens for understanding variation in strategic management effectiveness.

Although comparative higher education literature often emphasizes cross-national differences across countries and systems, this study deliberately focuses on intra-national variation. The Ethiopian higher education system provides a relatively unified policy environment, making it more appropriate to explore differences within the system rather than across countries. This sectorial approach allows for more contextually grounded insights into how institutional type influences strategic management practices under shared national regulations and standards.

At the same time, the study acknowledges that international literature on strategic management in higher education is often based on experiences from different institutional and national contexts. However, such literature does not always fully capture the specific dynamics of developing higher education systems like Ethiopia, where both public and private institutions operate under distinct but nationally regulated conditions. By focusing on sectoral variation within Ethiopia, this study contributes context-specific evidence that complements rather than replicates cross-national comparative research. In summary, the comparative perspective in this study is sectoral in nature, focusing on public and private universities within Ethiopia. This approach provides a structured way of examining how institutional ownership and governance arrangements shape strategic management practices, while remaining consistent with the study's design and data structure.

2.5. Empirical Evidence on SM Efficiency and Effectiveness in Higher Education

This section synthesizes empirical and conceptual literature on the efficiency and effectiveness of strategic management in higher education institutions (HEIs). The discussion is organized around conceptual foundations, empirical findings, strategic management components, methodological approaches, theoretical explanations, and research gaps.

2.5.1 Conceptual Foundations of Efficiency and Effectiveness in Strategic Management

Efficiency and effectiveness are widely recognized as two distinct but interrelated dimensions of strategic management performance in higher education. Efficiency refers to the ability of institutions to "do things right," meaning the optimal use of available resources to produce

maximum outputs (Khuzway & Mashaw, 2025). It is associated with productivity, cost minimization, and the quality of internal processes. Effectiveness, in contrast, refers to "doing the right things," meaning the extent to which institutions achieve their strategic objectives and fulfill their mission. While efficiency focuses on input–output optimization, effectiveness emphasizes goal attainment, value creation, and institutional relevance. Thus, efficiency is primarily operational and short-term oriented, whereas effectiveness is strategic and long-term oriented.

2.5.2 Empirical Evidence on Efficiency of Strategic Management in HEIs

Empirical studies indicate that efficiency in HEIs is reflected in optimal resource utilization and effective internal processes. Common indicators include timely implementation of strategic plans, efficient allocation of financial and human resources, minimization of operational waste, cost-effectiveness of programs, speed of decision-making, and process standardization (James, 2017). Thang and Tuyen (2023) further emphasize that efficiency is reflected in the quality of services delivered relative to available resources, highlighting coordination and continuous improvement. Similarly, Aniceto et al. (2025) argue that efficiency is closely linked to productivity and the ability of institutions to achieve more outputs with fewer inputs. Overall, efficiency is consistently conceptualized as a short-term, operational dimension of strategic management performance**.**

2.5.3 Empirical Evidence on Effectiveness of Strategic Management in HEIs

Effectiveness is defined as the extent to which HEIs achieve their strategic goals and fulfill institutional missions (Khuzway & Mashaw, 2025). It is concerned with long-term outcomes, institutional relevance, and stakeholder satisfaction. Empirical studies show that effectiveness is influenced by strategic orientation, institutional adaptability, and alignment with stakeholder expectations (Henry, 2021). Thang and Tuyen (2023) further describe effectiveness as a socially constructed outcome shaped by institutional context and external environment. Common indicators of effectiveness include student enrollment and progression, graduation rates, employability, research output, teaching quality, institutional competitiveness, and stakeholder satisfaction (James, 2017; Stukalina, 2014; Manuel, 2020). Mohammed (2022) adds that effective strategic management enhances academic quality, digital transformation, student well-

being, and institutional collaboration. Thus, effectiveness is widely understood as a long-term, outcome-oriented dimension of strategic management**.**

2.5.4 Strategic Management Components and Performance Outcomes in HEIs

Strategic management performance in HEIs is closely linked to core components such as strategy formulation, strategy implementation, and monitoring and evaluation. Literature indicates that Strategy formulation determines institutional direction and priorities, Strategy implementation translates plans into actionable outcomes and monitoring and evaluation ensures accountability and performance feedback. Leadership, governance systems, organizational structure, and resource allocation mechanisms also significantly influence efficiency and effectiveness outcomes.

2.5.5 Integrated Analysis of Efficiency and Effectiveness in HEIs

Although efficiency and effectiveness are conceptually distinct, they are increasingly treated as interrelated dimensions of strategic management performance (Richard et al., 2009). Empirical studies (James, 2017; Stukalina, 2014; Manuel, 2020) demonstrate that institutional performance is multidimensional and includes student outcomes (enrollment, retention, graduation) faculty capacity and qualifications resource utilization and financial management instructional effectiveness and research productivity and institutional advancement. This shows that strategic management effectiveness in HEIs depends on achieving a balance between efficiency and effectiveness.

2.5.6. Theoretical Explanations of Efficiency and Effectiveness in HEIs

The understanding of efficiency and effectiveness in higher education institutions (HEIs) can be strengthened through multiple theoretical lenses, particularly the Resource-Based View (RBV), Strategy Fit Theory (SFT), and Institutional Theory. These perspectives collectively explain how internal resources, strategic alignment, and institutional environments shape performance outcomes in HEIs.

From the *Resource-Based View (RBV)***,** efficiency is explained as the outcome of effective utilization of internal organizational resources such as human capital, leadership capability, institutional routines, and strategic planning systems (Barney, 1991; Grant, 1996). Institutions

that possess valuable and well-coordinated resources are better positioned to minimize waste, improve coordination, and enhance operational efficiency. Effectiveness, within this perspective, depends on whether these internal resources are strategically deployed toward achieving institutional goals and creating long-term value (Barney & Clark, 2007).

The *Strategy Fit Theory (SFT)* complements RBV by emphasizing alignment between internal capabilities and external environmental conditions. According to this view, efficiency improves when institutional strategies are aligned with regulatory frameworks, policy demands, and resource constraints, thereby reducing implementation barriers and coordination costs (Venkatraman, 1989; Donaldson, 2001). Effectiveness, on the other hand, is achieved when institutional strategies are responsive to external opportunities, stakeholder expectations, and environmental changes, ensuring that institutional actions are relevant and goal-oriented.

While RBV and SFT focus on internal resources and strategic alignment, Institutional Theory provides a broader explanation by emphasizing the influence of the external institutional environment on organizational behavior and performance. Institutional Theory argues that organizations, including HEIs, are shaped by formal rules, regulations, norms, and cultural expectations that define appropriate structures and practices within a given context (DiMaggio & Powell, 1983).

In the context of higher education, Institutional Theory explains that efficiency and effectiveness are not determined solely by internal managerial decisions but are also influenced by isomorphic pressures, including coercive, normative, and mimetic forces. Coercive pressures arise from government policies and regulatory requirements that compel universities to adopt standardized strategic management practices. Normative pressures stem from professional standards and academic norms that shape expectations about quality and accountability. Mimetic pressures occur when institutions imitate perceived successful universities in response to uncertainty.

From this perspective, efficiency in HEIs may be constrained or enabled by institutional rules and compliance requirements that shape resource allocation and administrative processes. Similarly, effectiveness is influenced by the extent to which universities gain legitimacy by conforming to external expectations while still achieving their internal goals. Institutional Theory therefore explains why universities operating in similar resource conditions may still exhibit

different levels of performance, as their behavior is also shaped by the need for legitimacy and conformity within their institutional environment.

Taken together, RBV explains efficiency and effectiveness through internal capabilities, Strategy Fit Theory explains them through alignment with the external environment, and Institutional Theory explains them through legitimacy pressures and institutional conformity. The integration of these three perspectives provides a more comprehensive understanding of strategic management performance in HEIs, highlighting that efficiency and effectiveness are shaped not only by internal managerial decisions but also by external institutional forces and contextual constraints.

2.5.7 Methodological Approaches in Existing Studies

Existing studies on strategic management efficiency and effectiveness in HEIs predominantly employ quantitative, qualitative, and mixed-method approaches. However, most studies are cross-sectional and descriptive in nature. Measurement approaches vary significantly, ranging from financial indicators to academic and perceptual measures. Units of analysis also differ, including institutional, faculty, and departmental levels. In addition, most studies are concentrated in developed countries, with limited representation of developing higher education systems.

2.5.8 Meta-Analytical and Cross-Study Insights

Cross-study synthesis reveals consistent patterns in the literature. Efficiency is strongly associated with resource management, administrative coordination, and operational effectiveness. Effectiveness is closely linked to academic quality, research productivity, and stakeholder satisfaction. However, findings also indicate contextual variation, particularly in how institutional governance and resource constraints influence performance outcomes.

2.5.9 Methodological Limitations in Existing Research

Several limitations are evident in the literature. First, efficiency and effectiveness are often studied separately rather than as integrated outcomes. Second, most studies focus on isolated performance indicators instead of examining strategic management as a system (formulation, implementation, and evaluation). Third, comparative and synthesis-based studies are limited.

Fourth, theoretical integration remains weak in many studies, with limited use of RBV and Strategy Fit Theory. Finally, there is a strong bias toward developed country contexts, limiting applicability to developing systems such as Ethiopia.

2.5.10 Research Gap and Contribution of the Present Study

To address these limitations, this study adopts an integrated and sectoral comparative approach. It conceptualizes efficiency and effectiveness as interconnected outcomes of strategic management practices and examines them through the core components of strategy formulation, implementation, and monitoring and evaluation. In addition, the study compares public and private universities in Ethiopia, providing context-specific evidence within a single national system. It also integrates RBV and Strategy Fit Theory to offer a stronger explanatory framework for understanding strategic management performance.

2.6 Leadership, Governance, and Strategic Management in Higher Education

Leadership, governance, and strategic management are central constructs in understanding institutional performance in higher education institutions (HEIs). In contemporary higher education systems, universities operate in increasingly complex environments characterized by accountability pressures, global competition, resource constraints, technological change, and stakeholder demands. Within this context, leadership, governance, and strategic management collectively shape how institutions formulate priorities, allocate resources, implement strategies, and achieve institutional goals. Although these concepts are closely interrelated, they are analytically distinct and perform different institutional functions. This section discusses the conceptual distinctions among leadership, governance, and strategic management; governance structures in higher education; leadership competencies for strategic management; the governance–leadership alignment model; and their implications for the present study.

2.6.1 Conceptual Distinctions: Leadership, Governance, and Strategic Management

Leadership refers to the capacity to influence, motivate, and guide individuals and groups toward the achievement of shared goals (Northouse, 2021). It primarily concerns human interaction, vision articulation, motivation, and change facilitation. Leadership focuses on mobilizing institutional members, fostering commitment, and ensuring that organizational goals are

translated into coordinated action. Strategic leadership, in particular, aligns institutional vision, mission, and operational processes while enabling institutions to respond adaptively to changing environmental conditions (Northouse, 2022).

Leadership theories have evolved from trait-based and behavioral approaches to more integrative perspectives emphasizing transformational, relational, and distributed dimensions. Transformational leadership, as explained by Bass and Riggio (2006), encourages followers to transcend personal interests in pursuit of collective institutional goals, thereby strengthening innovation, commitment, and strategic thinking. Transactional leadership, by contrast, focuses on supervision, performance expectations, and contingent rewards, often enhancing efficiency in structured administrative environments (Burns, 1978; Bass & Riggio, 2006). More recently, distributed leadership perspectives emphasize leadership as a collaborative and shared institutional process, particularly relevant in universities characterized by collegiality and professional autonomy (Spillane, 2006).

Governance, in contrast, refers to the formal structures, systems, rules, and processes through which organizations are directed, regulated, and held accountable. Governance establishes authority structures, oversight mechanisms, policy frameworks, and decision-making arrangements. It includes governing boards, councils, senates, committees, and regulatory frameworks that guide institutional direction and ensure accountability. Governance therefore provides the structural architecture within which leadership operates.

Contemporary governance scholarship emphasizes transparency, accountability, participation, and rule-based coordination as core principles of effective governance (Cornforth, 2012; Aguilera et al., 2019; OECD, 2021). Strategic governance focuses on long-term mission clarity and institutional direction, operational governance emphasizes policy implementation and control systems, while participatory governance enhances stakeholder inclusion and institutional legitimacy.

Strategic management differs from both leadership and governance in that it refers to the systematic process through which institutions formulate, implement, monitor, and evaluate strategies to achieve long-term objectives and sustain institutional performance. Strategic management provides the integrative framework connecting governance structures with

leadership processes. Governance establishes institutional priorities and accountability mechanisms; leadership mobilizes people and resources; strategic management coordinates these elements into coherent institutional action.

Thus, leadership, governance, and strategic management are distinct but complementary institutional dimensions. Governance answers questions of authority, accountability, and institutional direction; leadership addresses influence, mobilization, and change; while strategic management focuses on planning, implementation, alignment, and performance achievement.

2.6.2 Governance Structures in Higher Education: International Perspectives

Governance structures in higher education vary significantly across institutional and national contexts. Internationally, higher education governance models generally range from highly centralized state-controlled systems to decentralized and autonomous institutional arrangements.

In centralized governance systems, governments exercise substantial control over university financing, policy direction, staffing, and academic programs. Such systems prioritize accountability, regulatory compliance, and alignment with national development priorities. In decentralized systems, universities possess greater institutional autonomy in academic, financial, and administrative decision-making. These systems emphasize managerial flexibility, innovation, and institutional competitiveness.

Contemporary international trends increasingly promote hybrid governance arrangements that combine state oversight with institutional autonomy and stakeholder participation. These models seek to balance accountability with flexibility, particularly in response to growing demands for efficiency, quality assurance, and responsiveness in higher education.

Within HEIs, governance structures commonly include university boards, senates, executive leadership teams, and committee systems responsible for strategic oversight, policy approval, resource allocation, and institutional accountability. Effective governance structures contribute to institutional stability, transparency, and strategic coherence.

In developing higher education systems such as Ethiopia, governance structures are often influenced by government policy frameworks, regulatory mechanisms, and public accountability

expectations. As a result, governance arrangements significantly shape institutional strategic management practices and performance outcomes.

2.6.3 Leadership Competencies for Strategic Management in Higher Education

The growing complexity of higher education institutions requires leaders to possess competencies that extend beyond routine administration. Strategic leadership competencies are increasingly recognized as essential for effective strategic management and institutional transformation.

Key leadership competencies in HEIs include strategic thinking, vision articulation, decision-making capability, communication skills, stakeholder management, change management, resource mobilization, and adaptive capacity. Strategic leaders must be capable of aligning institutional mission and vision with operational activities while responding effectively to environmental uncertainty and policy change.

Transformational leadership competencies are particularly important in higher education because universities depend heavily on intellectual collaboration, professional commitment, and shared governance structures. Leaders who foster innovation, participation, trust, and institutional commitment strengthen both strategic implementation and organizational effectiveness.

Distributed leadership is also increasingly relevant in HEIs because strategic management processes involve multiple actors, including academic leaders, administrators, faculty members, and governing bodies. This collaborative approach enhances institutional learning, participation, and strategic responsiveness.

Consequently, leadership competencies directly influence the efficiency and effectiveness of strategic management processes within universities.

2.6.4 Linking Governance, Leadership, and SM to Efficiency and Effectiveness

The relationship among governance, leadership, strategic management, efficiency, and effectiveness represents a major theme in organizational and higher education literature. Governance establishes formal authority structures, accountability mechanisms, and policy direction, while leadership mobilizes institutional actors and resources to implement strategic

priorities. Strategic management integrates these processes through planning, implementation, monitoring, and evaluation systems.

Efficiency refers to the optimal utilization of resources, whereas effectiveness concerns the achievement of institutional goals and strategic objectives. Governance contributes to efficiency through oversight systems, accountability frameworks, financial controls, and performance monitoring mechanisms. Effective governance reduces duplication, strengthens resource allocation, and enhances institutional coordination.

Leadership contributes to efficiency by translating institutional priorities into coordinated operational action. Strategic leaders foster employee commitment, improve communication, encourage innovation, and enhance institutional adaptability (Northouse, 2022). Transformational leadership, in particular, strengthens productivity and institutional coordination.

Effectiveness, however, depends more strongly on strategic alignment and adaptive institutional capacity. Governance contributes to effectiveness by ensuring mission clarity, long-term continuity, stakeholder representation, and policy coherence. Leadership enhances effectiveness by articulating institutional vision, mobilizing stakeholders, and facilitating organizational change in response to environmental demands. Thus, institutional performance in HEIs emerges not from governance or leadership independently, but from their strategic interaction within broader strategic management systems.

2.6.5 Theoretical Foundations of the Governance–Leadership–SM Nexus

Several theoretical perspectives explain the relationship between governance, leadership, strategic management, efficiency, and effectiveness. Agency Theory argues that governance structures reduce information asymmetry and managerial opportunism through monitoring and accountability systems (Jensen & Meckling, 1976). Strong governance therefore enhances efficiency by aligning managerial actions with institutional objectives.

Stewardship Theory, in contrast, assumes that leaders act as institutional stewards committed to organizational goals (Davis et al., 1997). From this perspective, governance should empower rather than constrain leadership, thereby fostering innovation, commitment, and effectiveness.

The Resource-Based View (RBV) conceptualizes governance systems and leadership capabilities as strategic institutional resources (Barney, 1991). Governance structures coordinate resource deployment, while leadership functions as a dynamic capability that reconfigures institutional resources in response to environmental change (Teece, 2018).

Institutional Theory further explains how universities operate within broader regulatory, normative, and cultural environments (Scott, 2014). Governance structures ensure compliance and institutional legitimacy, while leadership mediates institutional pressures by translating external expectations into internal strategic reforms. Universities therefore pursue efficiency and effectiveness not only for performance reasons but also to maintain legitimacy within their institutional environment. Together, these theories provide a multidimensional explanation of how governance, leadership, and strategic management shape institutional performance.

2.6.6 The Governance–Leadership Alignment Model

The Governance–Leadership Alignment Model posits that institutional efficiency and effectiveness emerge from the strategic congruence between governance structures and leadership practices. Governance provides the formal architecture of accountability, oversight, and institutional direction, while leadership operationalizes these structures through strategic action, institutional mobilization, and adaptive management.

From this perspective, governance alone cannot ensure institutional success unless leadership effectively translates governance priorities into coordinated institutional action. Similarly, leadership without governance alignment may result in fragmented institutional behavior and weak accountability.

Efficiency is enhanced when governance establishes clear strategic priorities, transparent resource allocation systems, and performance monitoring frameworks, while leadership ensures disciplined implementation, coordination, and process optimization. Effectiveness emerges when governance policies, institutional mission, and leadership vision operate coherently to support long-term institutional goals and stakeholder expectations. Accordingly, sustainable institutional performance depends on the dynamic alignment between governance integrity and strategic leadership capacity.

2.6.7 Implications for the Present Study

The present study adopts the view that leadership and governance are foundational dimensions influencing strategic management practices in higher education institutions. Governance structures shape institutional authority, accountability, and strategic oversight, while leadership influences strategic direction, implementation capacity, and institutional adaptability.

Within the Ethiopian higher education context, governance and leadership arrangements significantly influence the efficiency and effectiveness of strategic management practices, particularly in relation to strategy formulation, implementation, and monitoring and evaluation. The study therefore conceptualizes governance and leadership not as isolated administrative functions, but as interdependent institutional mechanisms that shape strategic management outcomes. The Governance–Leadership Alignment Model, together with RBV, Institutional Theory, and Strategy Fit Theory, provides the theoretical basis for examining how institutional structures, leadership capacity, and strategic management processes interact to influence efficiency and effectiveness in Ethiopian comprehensive universities.

2.7 Factors Influencing Strategy Implementation in Higher Education Institutions

Strategy implementation refers to the process of translating formulated strategies into operational actions through the alignment of institutional resources, structures, leadership systems, and organizational processes (Obeidat et al., 2017). In higher education institutions (HEIs), effective strategy implementation requires not only formal strategic planning but also adaptive leadership, stakeholder commitment, institutional coordination, and continuous monitoring to ensure that strategic objectives are successfully realized. Contemporary strategic management literature increasingly recognizes that strategy implementation is a multidimensional and multilevel phenomenon influenced by interacting individual, organizational, and environmental factors.

Existing studies identify numerous determinants affecting strategy implementation in HEIs. Obeidat et al. (2017) categorize these determinants into seven major dimensions: strategic situation, organizational structure, leadership style, employee engagement, employee skills, supportive mechanisms, and enabling resources. Similarly, Piórkowska and Ryńca (2020) identify managerial competence, institutional policies, resource allocation, and reward systems as critical implementation drivers. These studies collectively demonstrate that successful strategy

implementation depends on the interaction between managerial, structural, behavioral, and contextual conditions.

Additional empirical evidence further reinforces the complexity of strategy implementation. Hassan et al. (2025) emphasize the importance of communication systems, incentive mechanisms, structural adjustments, and competent personnel in facilitating implementation success. Noggna (2023) highlights practical institutional constraints such as inadequate financial resources, shortage of qualified professionals, limited career development opportunities, and weak information technology infrastructure. Narne et al. (2024), on the other hand, stress the significance of strategy consensus, organizational culture, and people-oriented institutional practices. Expanding this perspective, Abalaka (2025) proposes eleven critical implementation dimensions, including strategy formulation quality, environmental uncertainty, managerial processes, planning effectiveness, resource allocation, control systems, and performance outcomes. Collectively, these studies suggest that strategy implementation cannot be explained through a single variable or organizational condition; rather, it emerges from the interaction of multiple institutional and environmental factors.

2.7.1 Individual-Level Factors Influencing Strategy Implementation

At the individual level, strategy implementation is strongly influenced by leadership competence, employee commitment, communication capacity, motivation, and professional skills. Strategic leaders play a critical role in translating strategic intentions into operational actions through vision articulation, coordination, motivation, and decision-making (Northouse, 2022). Leadership commitment and managerial competence therefore represent foundational drivers of implementation effectiveness.

Employee engagement and participation are also widely recognized as essential for successful implementation. Obeidat et al. (2017) argue that employee involvement enhances ownership of strategic goals and strengthens implementation commitment. Similarly, Hassan et al. (2025) identify communication and incentive systems as important mechanisms for sustaining employee motivation and institutional alignment. When institutional members understand strategic priorities and perceive implementation processes as participatory and transparent, resistance to change is reduced and implementation effectiveness improves.

Professional competency and technical expertise further influence implementation capacity. Noggna (2023) notes that shortages of qualified personnel and limited career development opportunities weaken institutional ability to execute strategies effectively. In higher education institutions, where implementation often depends on highly specialized academic and administrative expertise, inadequate human capital significantly constrains institutional performance. Organizational culture also constitutes an important behavioral factor. Narne et al. (2024) emphasize that collaborative and people-oriented institutional cultures enhance strategy consensus and institutional adaptability. In contrast, fragmented organizational cultures and low employee commitment often generate resistance, communication gaps, and implementation inconsistency. Thus, individual-level factors influence strategy implementation through leadership capability, employee behavior, communication quality, motivation systems, and institutional culture.

2.7.2 Organizational and Structural Factors Influencing Strategy Implementation

Organizational and structural factors represent another major dimension influencing strategic implementation in HEIs. Organizational structure determines authority relationships, communication channels, coordination mechanisms, and decision-making procedures. Strategy implementation becomes more effective when institutional structures align with strategic priorities and facilitate coordination across organizational units.

Obeidat et al. (2017) identify organizational structure and supportive mechanisms as central implementation determinants. Similarly, Piórkowska and Ryńca (2020) emphasize the importance of institutional policies, reward systems, and administrative coordination mechanisms. Effective implementation therefore requires clear institutional frameworks that support accountability, collaboration, and strategic alignment.

Resource availability is another critical structural factor. Strategic initiatives require sufficient financial resources, technological infrastructure, and operational support systems. Noggna (2023) demonstrates that budget limitations and weak technological infrastructure significantly constrain implementation capacity in HEIs. This challenge is particularly pronounced in developing higher education systems where institutional demands often exceed available resources.

Monitoring and evaluation (M&E) systems also play a central role in implementation effectiveness. Robust M&E systems provide feedback mechanisms that allow institutions to assess progress, identify implementation gaps, and adjust strategies accordingly. Weak evaluation mechanisms, however, reduce institutional learning and limit accountability in implementation processes. Consequently, organizational and structural factors influence implementation through institutional arrangements, resource systems, administrative coordination, and performance monitoring mechanisms.

2.7.3 Environmental-Level Factors Influencing Strategy Implementation

Strategy implementation in HEIs is also shaped by broader environmental conditions. Environmental-level factors include government policies, regulatory frameworks, political conditions, socio-economic pressures, technological change, and stakeholder expectations.

Abalaka (2025) identifies environmental uncertainty as a major implementation determinant, emphasizing that institutions must continuously adapt strategic actions to changing external conditions. Institutional Theory similarly argues that organizations operate within broader regulatory and normative environments that shape institutional behavior and strategic choices (Scott, 2014).

In higher education systems, government regulations, accreditation requirements, and national development priorities strongly influence institutional strategic direction. Universities are often required to align institutional strategies with national policy frameworks, quality assurance standards, and accountability expectations. Such external pressures may either facilitate or constrain implementation depending on institutional capacity and governance arrangements.

Technological transformation and globalization further intensify environmental complexity in HEIs. Universities increasingly face pressures related to digitalization, international competitiveness, research productivity, and stakeholder responsiveness. Institutions that fail to adapt strategically to these environmental changes often experience implementation challenges and declining institutional relevance. Thus, environmental factors influence strategy implementation by shaping institutional opportunities, constraints, legitimacy requirements, and adaptive demands.

2.7.4 An Integrated Multilevel Framework of Strategy Implementation

Contemporary strategic management literature increasingly recognizes that strategy implementation should be understood through an integrated multilevel framework rather than isolated variables. Successful implementation emerges from the interaction among individual-level, organizational-level, and environmental-level conditions.

At the individual level, leadership competence, employee commitment, communication, and organizational culture shape implementation behavior. At the organizational level, structures, resources, governance systems, and monitoring mechanisms determine institutional coordination and implementation capacity. At the environmental level, policy frameworks, stakeholder expectations, and socio-economic conditions shape institutional opportunities and constraints.

This integrated perspective aligns with the Resource-Based View (RBV), Strategy Fit Theory (SFT), and Institutional Theory. RBV explains how internal resources and capabilities support implementation effectiveness (Barney, 1991). Strategy Fit Theory emphasizes alignment between institutional strategies and environmental conditions (Venkatraman, 1989). Institutional Theory highlights how regulatory and normative pressures shape organizational behavior and strategic implementation (Scott, 2014).

Accordingly, strategy implementation effectiveness depends not only on internal managerial capability but also on the degree of coherence among institutional resources, organizational structures, leadership systems, and environmental demands.

2.7.5 Application to Ethiopian Comprehensive Universities

In the context of Ethiopian comprehensive universities, strategy implementation is influenced by a combination of individual, organizational, and environmental factors. Institutional leadership capacity, stakeholder participation, communication systems, and employee commitment significantly shape implementation effectiveness at the institutional level.

At the organizational level, resource limitations, weak monitoring and evaluation systems, administrative bureaucracy, and structural coordination challenges continue to affect implementation processes. Many Ethiopian universities experience constraints related to

financial resources, technological infrastructure, and qualified human capital, limiting institutional ability to execute strategic priorities effectively.

Environmental conditions also exert strong influence on implementation processes in Ethiopian HEIs. Government regulations, policy reforms, accountability pressures, and national development priorities shape institutional strategic direction and operational autonomy. Universities are increasingly expected to contribute to national economic transformation, research productivity, and quality improvement while operating within constrained resource environments.

Consequently, strategy implementation in Ethiopian comprehensive universities requires a context-sensitive and integrated strategic management approach that simultaneously addresses leadership capacity, organizational systems, stakeholder engagement, resource mobilization, and environmental alignment. Institutions that successfully integrate these multilevel conditions are more likely to achieve strategic efficiency, institutional effectiveness, and sustainable performance outcomes.

In summary, the literature demonstrates that strategy implementation in higher education institutions is influenced by interacting individual, organizational, and environmental factors. Effective implementation therefore requires an integrated multilevel perspective that recognizes the interdependence between leadership, institutional systems, and environmental conditions. Within Ethiopian comprehensive universities, addressing these interconnected challenges is essential for improving strategic management effectiveness, institutional performance, and alignment with national development priorities.

2.8. Experiences of SM practices in HEIs from some Selected Countries

Strategic management is a "messy, step-by-step and iterative practices that necessitates hard work and commitment from most people in the institution to move it toward the future," with a compelling vision of the future and enables the execution of its key operations. It is a systematic way to identifying and implementing necessary changes, as well as monitoring the organization's performance as it works toward its vision (Watson, 2000).

This subsection of the chapter provides insights/evidence of the global trends focusing on the *National frameworks* (vision and strategy, HEI laws, and the legal system of HEIs), *Governance* (the overall management, structure, powers, autonomy, accountability, quality assurance system, and research), and *Funding of HEIs* (the overall framework of funding, resource allocation, financial monitoring and evaluation, and income generation) in various contexts (Mohammed Hashim, 2022). These elements are crucial for understanding how higher education institutions adapt to shifting demands and challenges in the global landscape. By examining these elements, we can identify best practices and innovative strategies that improve the effectiveness and resilience of HEIs worldwide. Thus, the experiences and trends in SM practices in some developed and emerging countries' higher education institutions.

2.8.1. United States of America Scenario:

Strategic management evolved in the 1980s in the United States, as the higher education system encountered issues such as decreasing budgetary support, lower enrollments, and resource mobilization.

National Framework: The Harvard Policy Model was used as a planning model which was established at Harvard Business School. It is one of the most well-known and successful strategic planning models for corporate and non-profit organizations (Bryson, 2011). However, George Keller familiarized the notion and philosophy of implementing strategic management in an academic setting in 1983. SP has become a widely used management approach in higher education.

Governance of higher education in USA focus on the market rationality representing scientific reason, development, and commercialization in areas that were traditionally governed by professional judgment and the art of teaching. A management model similar to business in a free market economy is represented by the so-called "corporatization" of the institution as a result of this. For transparency and public viewing, all of the institutions have comprehensive strategic plans posted on their websites. Strategies for university accreditation are required of all schools. In American universities, strategic management appears to combine elements of the traditional and neo-managerailism, which emphasizes expanding undergraduate programs that are run in a mass production manner (Preston, 2001).

Funding: Higher education funding in USA is a complicated and diverse subject driven by different issues, comprising contributions from the state, municipal, and federal governments. Public institutions are generally funded by state tax appropriations, although this funding has been inconsistent in recent decades, necessitating an increased reliance on alternative sources like as federal grants and private donations. Private institutions, on the other hand, rely heavily on tuition fees, endowments, and gifts from alumni, benefactors, and foundations to sustain operations. The financial environment is also influenced by the sorts of institutions, with public, private not-for-profit, and private for-profit postsecondary institutions all dependent on different funding sources (Sophia et.al.2023).

2.8.2. Europe Scenario:

In order to further strategic management practices in academic settings, the Center for SM of European Universities was established in 1986. The recent Europe 2020 strategy placed a great emphasis on improving performance through modernizing HEI governance and educating their leaders through the "MODERN" project, which collaborates with partners to equip higher education to function in the face of external threats (Benneworth, 2011). Thus, the following subsection presents the experience of SM practices in some selected countries of Europe.

United Kingdom: Strategic management emerged in the early 1980s due to lose faith in universities' capacity to oversee them and conduct a critical, unbiased self-evaluation to improve their functions and output (Trow, 1980). As a result, the government directed all the institutions to develop a strategic planning. After the introduction of SM practices, the universities implemented a dramatic shift in the idea of the university's contribution to societal progress. Universities were conservative establishments at the time, independent, and unlikely to undergo major institutional reform.

National framework for SM practices: The national planning framework (NPPF) for UK HEIs was released in 2024, outlining the government's planning policies for HEIs and how they are anticipated to be implemented. It intended to improve capabilities to compete in global markets. The planning process focuses on reeducating authorized government budgets to inspire HEIs to seek other funding sources other than the state. It was also expected that enterprises will employ SM principles for internal operations in order to become more administratively efficient.

Governance: UK higher education governance is considered by a set of laws and regulations that control institutional operations and accountability, guaranteeing effective monitoring and strategic direction. As a result, the main governance framework includes *the higher education code of governance and regulatory environment*. The higher education code of governance describes the fundamental values and characteristics that make up an effective governance framework. These rules of governance have six components: responsibility, sustainability, reputation, inclusiveness and diversity, effectiveness, and participation. *Regulatory Environment* incorporates the higher Education and Research Act 2017 which oversees the governance of higher education in the UK and governs governing bodies' mission to maintain effective management and governance procedures in order to comply with all registration conditions. The governance of UK universities is generally controlled by entities such as the Office for Students (OFS) and the Quality Assurance Agency (QAA), which ensure that institutions adhere to strict standards for teaching, research, and financial management (CUC, 2020).

Funding: The funding landscape for higher education in the UK has advanced meaningfully over the years, and the key sources of funding include tuition fees (which have been driven by a reduction in direct government funding since 2005/06); government grants (which are an important component, but recent policy changes have resulted in a reduction and shift for higher education providers since 2024); and international student funding. These shifts have prompted institutions to seek alternative revenue streams, including partnerships with industry and increased emphasis on research funding. As universities adapt to these changes, the focus on attracting and retaining international students becomes even more critical for sustaining financial stability.

***New Zealand*:** Strategic management practice introduced in New Zealand in the 1970s and early 1980s to resolve problem in connection with the centralized government decision-making and management and ensure academic autonomy (Bagshaw, 2000).

National Framework for Planning: The tertiary education strategy guides New Zealand's national framework for higher education planning, reflecting the context and priority areas for education work programs. The plan intends to put learners first, eliminate barriers to access, provide high-quality teaching and leadership, address the future of learning and work, and

promote world-class inclusive public HE. The strategy also highlights equity, with specific steps for each priority area to guarantee that the strategy is executed.

Governance: HEIs in New Zealand are governed under the Education and Training Act 2020. It develops a higher education system that values "Te Tiritio Waitangi" and fosters "Mairo"-crown relationships, with the goal of achieving equal outcomes for all students. In addition, the Tertiary Education Commission "Oritentanga" was founded to champion and push greater outcomes for all learners, particularly "Mairo" and Pacific learners, who have lower retention and completion rates than others. These governance frameworks and methods are critical to determining the future of higher education in New Zealand, ensuring that the educational system better reflects the community's objectives, culture, and values.

Funding: New Zealand's higher education institutions rely mostly on public funding. The Tertiary Education Commission (TEC) is in charge of funding and monitoring tertiary education. The minister of tertiary education, skills, and employment limits any increases in local student fees through the annual maximum fee movement (AMFM). Universities receive funding from different sources such as the government, tuition fees from domestic and international students, research grants, revenue from commercialization opportunities, and philanthropic contributions. This diverse funding landscape allows institutions to enhance their educational offerings and invest in research and development. As a result, New Zealand's universities are able to maintain competitive standards while also catering to a growing number of international students seeking quality education.

2.8.3. Australia Scenario:

In 1988, the Australian federal government mandated institution-wide planning and management. The socioeconomic side of globalization, neoliberalism, which advocates decreasing public spending and privatizing all public services, and "marketing," which is widely disseminated and promotes competition, has also resulted in the restructuring of Australian universities. This condition is related to strategic management, corporatization, marketization, customization, modernization, professionalization, and major rationalization. These changes have led to a shift in how universities operate, often prioritizing financial sustainability over educational values. As a result, institutions are increasingly focused on attracting international

students and enhancing their global rankings, which can sometimes overshadow the quality of education provided to domestic students.(Thornton, 2005 and Harris, 2014).

National frame work for strategic planning: The National strategic framework creates strong actions for Australia's higher education sector dealing with upholding high-quality providers and high-quality courses reinforced by a strong and transparent controlling framework, realizing management system to provide continous growth over time, safeguarding delivering have robust alignment to skills necessities for a wealthy future, advancing foreign policy, economic and development interests, ensuring the system. This holistic approach not only enhances the reputation of Australia's educational institutions but also fosters collaboration with international partners. By prioritizing quality and relevance, the sector can better prepare students for the evolving job market while positioning itself as a leader in global education.

Governance: Australia's universities follow a tripartite governance model that includes *corporate governance* (led by the university council, which ensures effective oversight and strategic direction), *academic governance* (overseen by the academic board, which is in charge of academic standards and policies), and *university management* (led by the vice-chancellor, who is in charge of the university's day-to-day activities). Different legislative frameworks, such as the higher education standard framework, have an impact on governance approach. These frameworks help ensure that universities maintain high educational standards while promoting accountability and transparency. Additionally, they play a crucial role in fostering collaboration between different governance bodies to achieve the institution's strategic goals.

Funding: The higher education finance model is undergoing significant modifications to improve access and equity, with a new needs-based funding model set to debut in 2025 with the founding of the Australian Tertiary Education Commission (ATEC). A needs-based financing approach provides a base amount per student, with additional money for students from underrepresented backgrounds, such as low-income pupils and those with impairments. Universities are generally funded by Commonwealth research funds, student fees, and state government subsidies. The funding is also determined by the course type, with various subsidies for different disciplines of study.

2.8.4. Asia Scenario

China*:* Similar to what has happened in the UK and Australia, the market's impact has had a big impact on Chinese HEIs. As a result, the Chinese government prioritized raising the level of international competitiveness of its HE in the early 1990s. Project 211 and Project 985 were two significant initiatives that required institutions to create strategic management practices (Council, 2013).

National framework for strategic planning: China's national higher education plan presents a comprehensive framework for strategic development in higher education, highlighting critical components such as strategic initiatives, academic priorities, regional investment, international collaboration, and the promotion of access and equity. These elements demonstrate a national commitment to modernizing the higher education system and confirming its alignment with the demands of a rapidly evolving global environment.

Governance: China's higher education governance has evolved significantly, reflecting both the country's historical setting and the current educational landscape. The system has undergone decentralization measures to reduce centralized control, while maintaining a strong emphasis on "state instrumentalism" inside the administrative framework (Wen & Marginson, 2023).

Funding: The primary source of funding for higher education is the University Grants Committee (UGC), which was established to hold institutions of higher learning accountable for their cost-effectiveness and service to the general public. The UGC continues to downplay the social and human consequences of education marketization and has failed to recognize the negative impact of SM ideology (Mok, 1999).

Singapore: Singapore's social and economic needs have a strong relationship with higher education. The national push to develop human resources through education has been essential to the success of the nation since the National University of Singapore was founded in 1980. However, since the turn of the century, the way and to whom higher education is delivered has changed significantly due to factors like the growing demand for university spots, the influence of industry, the dominance of ICT, and the use of learning analytics. In 1995, the higher education sector had to adopt SM practices due to this changing situation.

National Framework for Strategic Planning: The national framework for strategic planning in higher education in Singapore is governed by the ministry of education's commitment to the holistic development of long-term learners. It is led by a strategy committee in the university president's office that focuses on long-term priorities, emergent concerns, and cross-cutting topics such as HIV and climate change. This teamwork works with colleges, units, stakeholders, and governmental agencies to strengthen university-wide initiatives on major issues such as educational quality and relevance, research, community participation, globalization, and internationalization. The framework is intended to accommodate to students' different talents and interests, resulting in a vast variety of learning experiences. It highlights the necessity of establishing a solid foundation that addresses educational demands in physical, artistic, moral, social, and emotional domains. It also emphasizes leadership abilities, social and emotional capabilities, and life skills such as creativity, teamwork, and empathy. It instills qualities like as respect, responsibility, resilience, integrity, and harmony, all of which are necessary for a cohesive, multiracial, and multicultural society.

Governance: Singapore's higher education governance is characterized by a centralized leadership system under the minister of education (MoE), who is in charge of policy formation, resource allocation, and quality assurance across all universities. The Ministry of Education enforces rigorous teacher certification standards, requiring educators to finish a degree at the National Institute of Education (NIE) and receive practicum training. This centralized governance model has been critical in ensuring the integrity and performance of higher education institutions. The governance architecture also includes a decentralization and marketization approach, which gives universities significant autonomy while remaining under governmental oversight. This paradigm was introduced through a series of reforms aimed at increasing higher education's worldwide competitiveness. Governance in higher education is more than just policies and processes; it is also about promoting an environment of creativity, cooperation, and continual improvement. Overall, Singapore's higher education governance is a mix of centralized and decentralized autonomy, with the goal of achieving academic excellence while maintaining integrity and accountability. This approach has helped HEI establish itself as a worldwide education hub and regional leader.

Funding: Singapore's higher education funding landscape is characterized by a mix of government initiatives, university grants, and private sector funding. Block grants, per-capita

financing, and tuition fees are all possible funding strategies. This was bolstered by a national commitment to the quality and relevance of education at institutions. Singapore is an appealing higher education location for international students since it provides fully financed scholarships that cover tuition, living expenses, and flights.

2.8.5. Africa Scenario

***Uganda*:** Public universities are often organizations founded and run by government organizations dedicated to enhancing education in the nation. *National framework*: the National HE Council of Uganda (NCHE) serves as the national framework for Uganda higher education institutions. It authorizes HEIs to provide degrees and advanced diplomas. *Governance:* The government should merely oversee the performance criteria of private colleges and have minimal control over their governance. *Funding:* Since universities are more dependent on government funding, strategic management is not typically valued in public institutions. However, private institutions should be able to raise money on their own. It is a crucial part of their administration because a lack of funding can have a detrimental effect on academic activities. Due to the need of executing SM practices, including the development of effective strategies, strategic initiatives, SP, coordination, direction, and control of decision-making, as well as the acquisition of management skills, effectiveness in problem-solving, administration, HRM, and leadership, public university management must develop bureaucracy in order to be deemed successful (Tibarimbasa, 2010).

South Africa: *The National Framework:* Act 101 of 1997 Regulations for HEIs serves as the national framework for South African HEIs. The national commission on higher education included four subcommittees that worked on transformation, funding, size, shape, and governance. Act 101 of 1997 governs the requirement that universities develop five-year SPs and announce the implementation of an SM approach. This method strives to enhance the quality and relevance of higher education in South Africa by ensuring that institutions' strategic plans are associated with national priorities. By encouraging collaboration among universities and stakeholders, the framework aims to stimulate innovation and improve educational outcomes for all students.

Governance: South African universities are managed and structured under the Higher Education Act No. 101 of 1997. This act requires universities to manage and structure themselves to ensure

legal compliance, which includes institutional registration, program accreditation, and adherence to national educational policies. This governance framework is required for higher education institutions to properly carry out their instructional and societal objectives.

Fundings: In South Africa, there are several funding sources for higher education, including government schemes. The National Student Financial Aid Scheme (NSFAS), as well as bursaries, scholarships, student loans, grants, and employer sponsorship, are important funding sources. These fund alternatives are implemented depending on student interests. Students may apply for each financing choice. Most funding sources require students to maintain a particular academic quality and reapply every academic year in order to pursue their higher education ambitions. In terms of SM practices, South African universities in the global topography that were formerly remote have changed as a result of South Africa's democratization. Universities were forced to execute SM in an effort to exploit the use of few resources due to the government's decreasing funding, donors' reordering of priorities, and the strong demand for HE. In an effort to provide certainty, this has compelled colleges to employ strategic planning, which has been borrowed from profit-making businesses.

Kenya: The Universities Act Cap 210 B serves as a *national framework* for public HEIs. It is established by an Act of Parliament. Additionally, due to the nation's rapid population increase, the Commission for University Education (2016) was launched. It confirms that the development and growth of Kenyan universities may be understood in terms of the country's educational system and the extension of training at all levels. Among other related services, universities are required to conduct study, train, and award academic credentials, diplomas, undergraduate degrees, and postgraduate degrees (CUE, 2016).

Governance: Kenya has addressed concerns of university governance by developing three frameworks: the Universities Act, Charter, and the Statutes. The Universities Act of 2012 offers for the foundation and development of university education; accreditation, and governance of universities; the establishment of the Commission for University Education, HE funding board, and University and Colleges Central Placement Service Board; the repeal of certain laws; and other related purposes. The University Charter defines the governance aims, decrees, rules, guidelines, and authorities, comprising those that permit for degree awards. Statutes serve as the supreme law and rules, providing extensive information about the university's governance. This

framework ensures that all academic institutions operate under a cohesive set of guidelines that promote accountability and quality in HEIs. By adhering to these principles, universities can better serve their communities and enhance the overall educational experience for students.

Funding: Kenya's higher education finance environment has lately evolved to a student-centered model (SCFM), emphasizing financial need and offering scholarships and loans to help students. In 2023, the government implemented the student-centered funding model to solve the issues encountered by public universities and technical and vocational education and training (TVET) colleges with differentiated unit costs (DUC), which previously provided block funding to universities. The strategy aims to provide a more egalitarian and sustainable approach to higher education funding by concentrating on program expenses and students' financial requirements. In addition, the Higher Education Loans Board (HELB) was founded, which plays a vital role in providing financial aid to students through loans and scholarships. This initiative not only supports students in accessing higher education but also encourages institutions to become more accountable for their financial management. As a result, universities and TVET colleges are increasingly focusing on enhancing their educational offerings to address the various desires of students while ensuring fiscal responsibility.

In terms of SM practices, the SM approach emerged in the early 1990s as a tool for change management in Kenya's higher education system. In this regard, Ofori and Atiogbe (2012) argue that market forces have made it challenge for HEIs to execute new laws in order to compete in the global education market. Ndunda (2017) stated that Kenyan public universities performed poorly due to limitations in implementing strategic management strategies. Furthermore, Njega and Gachunga (2016) claimed that top leadership at public institutions did nothing to encourage the implementation of SM practices as student enrollment increased. These problems highlight the necessity for an inclusive method to strategic management that not only addresses immediate operational issues but also fosters an environment conducive to long-term growth and innovation. By prioritizing leadership development and resource allocation, Kenyan public universities can enhance their ability to address the growing demands of the global education setting.

Ethiopia*:* Education and training policy (ETP, 1994), policy directions, guideline, education sector development programs, introduction of merit-based approach to assign top management

Differentiation of the higher education system, introduction of institutional autonomy and academic freedom, education development roadmap and proclamations were ratified to serve as national framework for higher education. Currently, proclamation 1152/2019 serves as National framework for higher education institutions. Six Education Sector Development initiatives were launched (ESDP-I-VI) between 1998 and 2023 to restructure the education sector (industry). These education sector development programs affirm that the core objectives of HEIs include teaching and learning, research, and community services, as well as internationalization and partnership. Also, it declares that HEIs are considered milestones for advancing the nation's socio-economic and political situation.

Governance of higher education: Ethiopian HEIs are overseen by a university board, president and vice presidents, senate, managing council, university council, academic unit council, and others to balance academic leadership with administrative oversight, with a merit-based approach to assigning top management and empowering women in higher education administration. Furthermore, University Autonomy Proclamation No. 1294/2023 developed a comprehensive structure in which various important governing bodies collaborate to drive institutional directions. The governance model is mostly state-oriented, with elements of academic, self-rule, and market-oriented approaches suggesting a possible shift toward a hybrid form. This evolving landscape presents both opportunities and challenges for higher education institutions. As they navigate this hybrid governance model, it is crucial for these bodies to prioritize transparency and inclusivity to foster an environment that supports diverse leadership and academic excellence.

Funding: Ethiopia's higher education system is primarily funded by the government. There are also other funding mechanisms such as tuition fees, cost sharing scheme, income generation and donors. Higher education funding in Ethiopia has been a significant concern due to the hasty increase of the school-age population and the need for efficient resource allocation. As a result, the Ethiopian government implemented a cost-sharing strategy to reduce the financial load on students, although overall funding remains a key issue (Yigezu, 2003).

2.8.6. Justification for the Selection of Countries' Experiences in Relation to SM Practices

The selection of country cases namely the United States, Australia, China, Singapore, United Kingdom, New Zealand, Uganda, Kenya, South Africa, and Ethiopia is grounded in the need to

examine strategic management practices across heterogeneous institutional, economic, and governance contexts. Strategic management in higher education institutions (HEIs) is shaped by national policy frameworks, levels of autonomy, accountability regimes, and resource endowments; therefore, a cross-country perspective enhances analytical depth and theoretical generalizability (Bryson, 2018; Kettunen, 2015).

***Developed Country Contexts: Benchmarking Mature SM Systems*:** The experiences of the United States and Australia are justified by their long-standing traditions of formal strategic planning, performance-based funding, and decentralized institutional governance. HEIs in these countries typically employ comprehensive environmental scanning, deliberate strategy formulation, and systematic monitoring and evaluation mechanisms to align institutional goals with national and market demands (Taylor & Baines, 2012; Poister et al., 2010). These contexts provide robust benchmarks for understanding how strategic management contributes to institutional efficiency, competitiveness, and accountability in relatively stable and resource-rich environments.

Similarly, the United Kingdom and New Zealand offer valuable European and Anglo-Saxon governance perspectives characterized by strong quality assurance systems, outcome-oriented management, and policy-driven strategic alignment. Strategic management practices in these countries illustrate how HEIs respond to government steering through performance indicators, strategic compacts, and accountability frameworks, thereby offering insights into the institutionalization of strategic management in public higher education (Ferlie et al., 2008; Kettunen, 2015).

Asian Contexts: State-Led and Hybrid Strategic Management Models: The inclusion of China and Singapore is justified by their distinctive state-led and hybrid models of strategic management in higher education. In these contexts, strategic priorities are closely aligned with national development agendas, innovation policies, and global competitiveness goals. HEIs often operate within centralized strategic frameworks while simultaneously exercising managerial flexibility to build internal capabilities (Marginson, 2011). These cases are particularly relevant for illustrating how deliberate strategy and strong state coordination can coexist with institutional performance incentives, offering alternative pathways to strategic fit beyond Western managerial models.

***African Contexts: Emerging and Adaptive Strategic Management Practices*:** The selection of Uganda, Kenya, South Africa, and Ethiopia is justified by the need to capture strategic management practices within developing and resource-constrained higher education systems. In these contexts, HEIs frequently face funding limitations, rapid enrollment expansion, and policy volatility, which shape more emergent and incremental strategic approaches (Mintzberg, 1994; Bryson, 2018). South Africa, in particular, provides an advanced African case where formal strategic planning and performance management systems are relatively well developed, while Uganda, Kenya, and Ethiopia illustrate transitional systems striving to institutionalize strategic management practices amid structural constraints.

Theoretical Justification: Strategy Fit Theory and the Resource-Based View: From a theoretical perspective, the cross-continental selection of countries aligns strongly with Strategy Fit Theory and the Resource-Based View (RBV). Strategy Fit Theory emphasizes the alignment between organizational strategy and external environmental conditions, which differ markedly across national higher education systems (Venkatraman, 1989). Meanwhile, RBV highlights how variations in internal resources and capabilities such as managerial expertise, financial capacity, and institutional autonomy shape the effectiveness of strategic management practices (Barney, 1991). By examining countries with diverse environmental pressures and resource profiles, the study is better positioned to assess how strategic fit and resource configurations influence strategic management outcomes in HEIs.

Overall, the selection of these countries is conceptually, empirically, and theoretically justified. It enables a comprehensive comparative analysis of strategic management practices across mature, hybrid, and emerging higher education systems; supports theory-driven insights into strategic fit and resource utilization; and enhances the policy relevance of the findings for HEIs seeking to adapt global best practices to local realities, particularly within African and developing-country contexts.

2.8.7. Lessons Learned from Multi-Regional Scenarios

The deliberate selection of the United States, Australia, China, Singapore, the United Kingdom, New Zealand, Uganda, Kenya, South Africa, and Ethiopia provides critical lessons for understanding the dynamics of strategic management (SM) in higher education institutions

(HEIs) across heterogeneous contexts. These lessons emerge from comparative insights into institutional, economic, and governance variations, illustrating how national conditions shape the adoption, implementation, and outcomes of strategic management practices.

***Contextual Adaptation of Strategic Management Practices*:** The cross-continental selection reinforces that strategic management is context-sensitive. Developed country contexts such as the United States, Australia, the United Kingdom, and New Zealand demonstrate how HEIs leverage mature governance systems, comprehensive environmental scanning, and structured performance management mechanisms to achieve efficiency and accountability (Taylor & Baines, 2012; Poister et al., 2010). Conversely, African contexts including Uganda, Kenya, South Africa, and Ethiopia highlight how resource constraints, policy volatility, and rapid enrollment expansion necessitate more emergent, adaptive, and incremental approaches to strategic planning (Mintzberg, 1994; Bryson, 2018). Effective strategic management requires aligning practices with local institutional capacities, resource availability, and governance frameworks, rather than replicating models from resource-rich environments wholesale.

***Diverse Pathways to Strategic Fit*:** Asian cases, particularly China and Singapore, illustrate how state-led or hybrid strategic models can achieve strategic alignment with national development agendas while fostering institutional flexibility and capability-building (Marginson, 2011). This contrasts with Western approaches, where strategy is often decentralized and market-driven. By examining these variations, the study underscores that there are multiple pathways to achieving strategic fit between internal resources, capabilities, and external pressures. Strategic management effectiveness depends not only on formal planning mechanisms but also on the nuanced interplay between external environmental demands and internal organizational resources.

Comparative Learning and Benchmarking: The inclusion of mature HEI systems in the United States, Australia, the UK, and New Zealand provides benchmarking opportunities for emerging systems, highlighting best practices in accountability, performance management, and alignment with policy objectives (Ferlie et al., 2008; Kettunen, 2015). Similarly, transitional systems in Africa demonstrate innovative responses to resource constraints, offering lessons in flexibility, emergent strategy, and institutional resilience. Comparative analysis facilitates mutual learning,

enabling HEIs in resource-constrained contexts to adapt global best practices in ways that are locally feasible and culturally appropriate.

***Theoretical Validation and Advancement*:** From a theoretical perspective, this multi-regional selection validates and extends Strategy Fit Theory and the Resource-Based View (RBV). Strategy Fit Theory emphasizes the necessity of aligning organizational strategies with external environmental conditions, which vary significantly across nations (Venkatraman, 1989). RBV highlights how internal resources such as managerial expertise, financial capacity, and institutional autonomy mediate the effectiveness of strategic management (Barney, 1991). The diversity of selected countries allows for testing these theories under varying environmental pressures and resource configurations, providing empirically grounded, theory-driven insights. Cross-contextual analysis enhances theoretical robustness, demonstrating that both environmental alignment and resource endowments jointly determine the success of strategic management in HEIs.

***Policy and Practice Implications**:* The comparative insights emphasize the need for context-sensitive policy adaptation. While global best practices offer useful frameworks, their implementation must consider local governance structures, resource constraints, and cultural factors to ensure relevance and sustainability. For African and developing-country HEIs, lessons from mature and hybrid systems inform practical strategies to institutionalize strategic management while remaining adaptive to changing conditions. Thus, Policymakers and institutional leaders should leverage global experiences as flexible guides, tailoring practices to local realities to enhance strategic outcomes.

In summary, the multi-regional selection shares that strategic management in HEIs is both contingent and adaptable, shaped by the interaction of national policy, governance, resources, and institutional culture. The lessons learned reinforce that comparative research not only advances theoretical understanding (Strategy Fit and RBV) but also provides actionable insights for improving efficiency, accountability, and strategic alignment across diverse higher education systems.

2.9. Chapter Summary and Synthesis

This chapter reviewed the theoretical, conceptual, and empirical foundations of strategic management (SM) in higher education institutions (HEIs). The review synthesized major theoretical perspectives, global and developing-country experiences, comparative perspectives, empirical evidence on efficiency and effectiveness, leadership and governance issues, and factors influencing strategy implementation. The chapter was organized to establish both the intellectual foundation and the empirical justification for the present study.

The review demonstrated that strategic management has evolved from a private-sector managerial approach into a critical governance and performance framework for higher education institutions. Theoretical discussions highlighted that SM in HEIs can be understood through multiple complementary and competing theoretical lenses, including the Resource-Based View (RBV), Strategy Fit Theory (SFT), Institutional Theory, Agency Theory, and Stewardship Theory. Collectively, these theories explain that institutional performance depends on the interaction between internal capabilities, environmental alignment, governance systems, legitimacy pressures, and leadership capacity. The literature further established that strategic management is not limited to strategic planning alone, but involves an integrated process of environmental scanning, strategy formulation, implementation, monitoring, and evaluation. The review also revealed several established findings within global higher education literature. First, there is broad agreement that strategic management contributes positively to institutional performance, efficiency, adaptability, competitiveness, and long-term sustainability when effectively implemented (Pearce et al., 2002; Mohamud et al., 2015). Second, the literature consistently shows that leadership, governance structures, stakeholder engagement, organizational culture, communication systems, and resource availability significantly influence strategy implementation effectiveness (Obeidat et al., 2017; Hassan et al., 2025). Third, empirical evidence suggests that successful strategic management in HEIs requires alignment between institutional mission, governance structures, environmental conditions, and implementation capacity (Fumasoli & Lepori, 2011). Similarly, studies consistently emphasize that monitoring and evaluation systems, institutional coordination, and adaptive leadership are essential for sustaining institutional efficiency and effectiveness.

However, the review also identified several contested and debated issues in the literature. One major debate concerns the applicability of corporate strategic management models to higher education institutions. Scholars such as Holdaway and Meekison (1990) and Nutt and Backoff (1987) argue that business-oriented strategic planning models are often too rigid and insufficiently sensitive to the political, collegial, and decentralized nature of universities. Similarly, debates exist regarding centralized versus decentralized governance structures, particularly concerning the balance between state control, institutional autonomy, accountability, and academic freedom. Another contested issue relates to the relationship between strategic management practices and organizational performance, as empirical findings have produced mixed results, including positive, weak, absent, and sometimes negative relationships depending on institutional and contextual conditions (Pearce et al., 2002; Rintari & Moronge, 2012). The literature also debates whether strategic planning in universities represents genuine institutional transformation or merely symbolic compliance and bureaucratic "paper exercises" disconnected from academic realities (Pidcock, 2001).

Beyond these debates, the review identified several important knowledge gaps that remain insufficiently addressed in the literature. Existing research is heavily concentrated in developed countries, while empirical evidence from developing higher education systems remains limited. In the Ethiopian context specifically, strategic management research is still fragmented and underdeveloped. Most existing studies focus narrowly on strategic planning rather than examining the broader strategic management process, including implementation, monitoring, and evaluation. Comparative studies remain limited, particularly those examining sectoral or institutional differences within higher education systems. In addition, many previous studies analyze isolated dimensions of strategic management rather than integrating efficiency, effectiveness, leadership, governance, and implementation factors within a comprehensive analytical framework. Methodologically, prior studies also rely heavily on descriptive approaches and underutilize advanced analytical techniques such as Structural Equation Modeling (SEM), which can better explain complex relationships among strategic management variables.

This study addresses these identified gaps in several important ways. First, it adopts an integrated strategic management perspective by examining environmental scanning, strategy formulation,

strategy implementation, and monitoring and evaluation as interconnected dimensions of institutional performance. Second, the study examines both efficiency and effectiveness outcomes of strategic management practices rather than focusing on only one performance dimension. Third, the study incorporates leadership, governance, and implementation factors within a unified analytical framework informed by RBV, Strategy Fit Theory, and Institutional Theory. Fourth, the study adopts a sectoral comparative perspective within the Ethiopian higher education context, thereby generating context-specific evidence relevant to comprehensive universities. Finally, the study employs Structural Equation Modeling (SEM) to examine complex relationships among strategic management constructs, thereby contributing methodological advancement to strategic management research in Ethiopian higher education.

Overall, the chapter established that strategic management in higher education is a multidimensional and context-dependent process shaped by leadership, governance, institutional capabilities, environmental conditions, and implementation effectiveness. While substantial global literature exists, important contextual, conceptual, comparative, and methodological gaps remain, particularly within developing higher education systems such as Ethiopia. These gaps provide the rationale and justification for the present study.

The next chapter presents the research methodology employed in the study. It discusses the research philosophy, research design, study area, population and sampling procedures, data collection instruments, validity and reliability measures, methods of data analysis, operationalization of variables, and ethical considerations guiding the study.

CHAPTER THREE

RESEARCH DESIGN AND METHODLODY

Research methodology entails a comprehensive method to scientific examination that outlines how study problems should be addressed. It is designed to ensure rigor, credibility, and reliability of the study. This chapter presents the research methodology used to examine the influence of strategic management practices on organizational efficiency and effectiveness in comprehensive universities in Ethiopia.. It explains the philosophical assumptions, research design, approach, population, sampling procedures, data sources, instruments, data collection procedures, methods of data analysis, validity and reliability and ethical issues of the study.

3.1. Research Paradigm and Philosophical Assumption

3.1.1. Research Paradigm:

A paradigm describes a collection of views that govern what should be studied, what information is sought, how study should be conducted, and how the findings should be analyzed and evaluated (Kivunja & Kuyini, 2017); how researchers select both the research questions and methods (Reham & Alharthi, 2016); offers flexibility in selecting research methods (Lu & Taghipour, 2025); and how the researcher establishes the structure, foundation, and outlines the path to investigate the research (Davies & Fisher, 2018). This comprehensive framework influences every aspect of the research process, ensuring that the chosen methodologies align with the underlying beliefs and reality as well as the interpretations and conclusions were drawn from the findings. Ultimately, it shapes not only the questions posed but also outlines the path to investigate the research. This implies that a paradigm brings clarity and improves the quality of the methods and analysis of the study.

As a result, this study is grounded in the pragmatic research paradigm, which recognizes combining both qualitative and quantitative approaches. The primary justification/argument for adopting this paradigm was that strategic management practices involve both measurable outcomes (e.g., efficiency, research output) and contextual/behavioral factors (e.g., leadership, stakeholder engagement) to capture the complexity of higher education strategic management (Khan, 2016). Also, it allows the integration of positivist assumptions (to measure efficiency and effectiveness quantitatively) with interpretivist assumptions (to understand meanings,

experiences, and contextual factors influencing strategic management). This philosophical stance is appropriate for examining how strategic management practices are designed, implemented, and experienced within Ethiopian public comprehensive universities operating in a dynamic socio-political and institutional environment. Moreover, it is relevant because it allows ideal and flexibility in research method to gather data and address research questions by utilizing both qualitative and quantitative approaches/hybrid from all relevant sources when exploring complex phenomena like the efficiency and effectiveness of strategic management practices (Tashakkori & Teddlie, 1998, 2003a). Therefore, a mixed approach with pragmatic view was utilized to collect and assess quantitative data in conjunction with qualitative data, while an interpretive view was employed to acquire data directly from key informants of interviews and focus group participants.

3.1.2. The Philosophical Assumption of Research Paradigm:

Pragmatism allows integration of both positivist and interpretivism philosophy. As a result, Strategic management in higher education involves measurable organizational processes (planning, implementation, monitoring, efficiency, effectiveness) and human meanings, perceptions, experiences, and institutional contexts. Thus, understanding strategic management requires objective measurement (positivism) and subjective interpretation (interpretivism).

Ontological Assumptions (Nature of Reality): This study adopts a pragmatic ontological stance, which rejects a rigid separation between objective and subjective reality and instead views reality as plural, context-dependent, and best understood through multiple forms of evidence (Creswell & Plano Clark, 2018; Morgan, 2014). This position is suitable for examining strategic management in higher education, where both formal organizational structures and socially constructed meanings coexist. *Ontologically*, the study recognizes two analytically distinct but interrelated dimensions of reality. First, objective and institutionally embedded realities such as policies, structures, strategic plans, and performance indicators are treated as observable organizational artifacts that can be measured using quantitative approaches, consistent with positivist assumptions of empirical regularity (Saunders, Lewis, & Thornhill, 2019). Second, subjective and socially constructed realities such as perceptions of strategy effectiveness, leadership commitment, and implementation experiences are interpreted as context-bound meanings that require qualitative exploration (Bryman, 2016; Creswell & Poth, 2018).

From a pragmatic perspective, these dimensions are not contradictory but complementary. Pragmatism prioritizes methodological appropriateness based on the research problem rather than ontological purity, allowing the integration of different forms of evidence to generate useful knowledge (Morgan, 2014). Accordingly, quantitative methods capture structural and performance-related dimensions, while qualitative methods explore stakeholder interpretations and experiences, enabling a comprehensive understanding of strategic management practices (Creswell & Plano Clark, 2018). Thus, this pragmatic ontology provides a coherent justification for a mixed-methods design, integrating objective organizational measures with subjective interpretations to produce a holistic and practically relevant explanation of strategic management in higher education institutions.

Epistemological Assumptions (Nature of Knowledge): This study is anchored in a pragmatic epistemological perspective, which views knowledge as generated through inquiry, experience, and its practical usefulness in addressing real-world problems (Morgan, 2014; Creswell & Plano Clark, 2018). Within this framework, knowledge is not limited to a single source; rather, both quantitative and qualitative evidence are considered valid and complementary for understanding complex organizational phenomena such as strategic management. Accordingly, quantitative data, analyzed through techniques such as structural equation modeling (SEM), provide explanatory and generalizable insights into the relationships between strategic management practices and organizational performance (Saunders, Lewis, & Thornhill, 2019). At the same time, qualitative data, derived from interviews and open-ended responses, offer contextual and interpretive understanding of how leaders and staff perceive and experience these practices (Creswell & Poth, 2018; Bryman, 2016). From a pragmatic standpoint, knowledge emerges through the integration of empirical measurement and human interpretation**,** where truth is judged by what effectively explains and improves practice (Morgan, 2014). This epistemological position therefore directly justifies the use of a mixed-methods approach, ensuring that the study produces findings that are both analytically robust and contextually meaningful.

Axiological Assumptions (Role of Values): Pragmatism acknowledges that researchers bring values, but must manage them transparently and aim for practical improvement. The study seeks to improve strategic management practices in higher education and the findings are intended to

inform policy, leadership practice, and institutional reform. Therefore, the value orientation of pragmatism aligns with the study's applied and problem-solving purpose.

Methodological Assumptions (Approach to Inquiry): Pragmatism supports mixed methods designs, Use of multiple data sources and flexibility in technique selection. In this study, quantitative data analysis method including descriptive statistics (frequency, percentage, mean and standard deviation) inferential statistics (structural equation model (SEM) and factor analysis) were used to test relationships and possibly qualitative insights (interview, and focus group discussions) were used to explain why and how relationships occurs. Hence, Methods are selected because they best answer the research questions, not because they belong to a single philosophical tradition.

Within this study, *positivist assumptions* are integrated through the recognition that certain aspects of SM practices in higher education exist as observable and measurable realities. Constructs such as environmental scanning, strategy formulation, strategy implementation, and monitoring and evaluation can be operationalized using standardized indicators and quantified through survey instruments. The use of statistical techniques, including structural equation modeling, reflects a positivist orientation toward identifying patterns, testing hypothesized relationships, and estimating the strength and direction of effects among variables. These procedures assume that empirical regularities can be discovered and that generalizable explanations can be generated through systematic measurement and analysis.

At the same time, *interpretivist assumptions* are incorporated by acknowledging that strategic management practices are enacted by individuals whose actions are shaped by their experiences, beliefs, values, and institutional contexts. The effectiveness and efficiency of strategic processes cannot be fully understood solely through numerical indicators, because they also depend on how organizational actors interpret policies, perceive leadership practices, and make sense of institutional priorities. Interpretivism therefore contributes an emphasis on understanding meanings, perspectives, and contextual influences that underlie observed patterns in the data.

In summary, the philosophical stance underpinning this study is Pragmatism, which integrates objective measurement with interpretive understanding to generate practically relevant

knowledge. By combining quantitative rigor with contextual interpretation, the study adopts a problem-centered approach that prioritizes actionable insights over methodological purity. This stance is particularly appropriate for applied research in higher education, where complex institutional realities require both empirical validation and contextual meaning-making to inform evidence-based strategic decision-making.

3.2. Research Design

Research design is determined by the researcher's worldview assumptions and research processes, such as sampling, data collection, analysis, and interpretation methods. This implies that the comprehensive nature of research design, outlining its role in shaping the overall approach to a study. It is influenced by various aspects, including the nature of the issue being addressed, the investigators' own experiences, and the study's viewers (Creswell, 2007a:25).

The study employed an explanatory sequential mixed-methods design in which quantitative data collection and analysis constituted the first phase of the study, followed by qualitative inquiry intended to explain and elaborate quantitative findings. The qualitative phase was therefore developed based on the results obtained from the quantitative analysis. Specifically, interview questions and participant selection were guided by areas where survey findings indicated weak, moderate, contradictory, or unexpected implementation practices. The sequential explanatory QUAN → QUAL mixed methods design is particularly appropriate for this study because it allows for systematic measurement of key constructs while also providing contextual understanding of the underlying mechanisms. The design inherent complexity of strategic management within higher education institutions (HEIs), which operate at the intersection of academic autonomy, governmental regulation, public accountability, and resource constraints. Such institutional dynamics require both empirical measurement of structural relationships and contextual interpretation of managerial and governance processes.

Quantitative Strand (QUAN): The quantitative component serves as the dominant strand of this study, reflecting the centrality of efficiency and effectiveness as measurable constructs essential for evaluating strategic management practices in Ethiopian comprehensive universities. Structured surveys were administered to academic leaders, managers, and staff to capture data on environmental scanning, strategic planning, strategy implementation, and monitoring practices.

This strand focuses on testing hypothesized relationships between strategic practices and institutional performance outcomes. Quantitative analysis provides evidence of the magnitude, direction, and significance of these relationships, enabling generalizable conclusions and supporting rigorous hypothesis testing. The operationalization of constructs through validated instruments and statistical techniques such as regression and structural modeling ensures reliability, validity, and empirical rigor.

Qualitative Strand (QUAL): The qualitative component is designed to provide explanatory and contextual insights that complement the quantitative results. Semi-structured interviews and document analyses capture the experiences, perceptions, and reflections of university leaders and stakeholders. This strand explores why certain strategic management practices succeed or fail, examining factors such as institutional culture, leadership behavior, resource allocation, and procedural challenges. Qualitative findings enhance understanding of complex institutional dynamics and help interpret variations in efficiency and effectiveness that may not be evident from quantitative data alone.

Integration of Quantitative and Qualitative Strands: The integration of the sequential explanatory QUAN → QUAL design occurs primarily at the at the interpretation and explanation stage where quantitative results are complemented and contextualized by qualitative insights. Quantitative data are collected and analyzed first to identify statistically significant relationships between strategic management practices such as environmental scanning, strategy formulation, implementation, and monitoring & evaluation and institutional performance outcomes, namely efficiency and effectiveness. The subsequent qualitative phase is purposefully designed to explain these quantitative results, with interviews and document analyses directed at understanding why certain practices succeed or fail. Integration occurs through *connecting data across phases*, where qualitative questions are guided by the quantitative findings, and *through explanatory interpretation*, where narratives, leadership perspectives, and contextual factors clarify the mechanisms underlying the statistical patterns.

Additionally, *triangulation and complementarity* are employed to corroborate findings and provide richer, context-sensitive insight. This approach ensures that the study not only identifies measurable relationships but also produces theoretically informed and practically relevant

explanations, enhancing the validity, interpretive depth, and actionable relevance of the research for improving strategic management in Ethiopian comprehensive universities.

In summary, by combining quantitative rigor with qualitative depth, the sequential explanatory QUAN → QUAL design therefore achieves a synergistic integration of rigor and depth: quantitative analysis establishes the magnitude and significance of relationships, while qualitative inquiry provides rich, context-sensitive explanations of why some strategic management practices succeed or fail. This approach aligns methodologically with the study's dual objectives of empirical validation and theoretical insight, and it is particularly suitable for investigating complex, context-dependent phenomena such as strategic management in higher education. In this way, the design ensures that conclusions are both statistically robust and institutionally meaningful, offering practical guidance for policy and managerial interventions in Ethiopian universities.

3.3. Research Approach

This study adopts a sequential explanatory mixed-methods research approach (QUAN → QUAL) to investigate strategic management practices (SMP) and their effects on efficiency and effectiveness in comprehensive universities in Ethiopia. The approach is grounded in pragmatism, allowing the integration of quantitative measurement and qualitative exploration to address both empirical patterns and contextual mechanisms (Creswell & Creswell, 2018). The study is theoretically anchored in Strategy-Fit Theory and the Resource-Based View (RBV), guiding the operationalization of SMP and interpretation of efficiency and effectiveness outcomes. Strategy-Fit Theory emphasizes the alignment between organizational strategy and internal/external environments, while RBV highlights the strategic role of unique resources and capabilities in generating sustainable performance advantages (Barney, 1991; Venkatraman, 1989).

Quantitative Strand (QUAN): Measuring SMP, Efficiency, and Effectiveness

The quantitative strand provides the empirical foundation by measuring the adoption of SMP and assessing their impact on efficiency and effectiveness. Drawing from Strategy-Fit Theory, the survey measures how well institutional strategies align with environmental conditions, regulatory frameworks, and stakeholder expectations. From the RBV perspective, the survey also evaluates

the utilization of unique organizational resources, such as academic expertise, governance structures, and information systems, in achieving strategic objectives. Data are collected via structured questionnaires administered to academic and administrative staff involved in strategy formulation and execution. Descriptive statistics profile the adoption of SMP, while inferential statistics including structural equation model, factor analysis and ANOVA examine the relationships between strategy fit, resource deployment, and institutional efficiency and effectiveness. This phase addresses the "what" dimension of the study: which SMP practices are adopted, and how do strategy alignment and resource capabilities relate to performance outcomes.

Qualitative Strand (QUAL): Exploring Mechanisms and Context

The qualitative strand builds upon the QUAN findings to provide contextual explanations for the observed patterns. Purposeful sampling identifies participants representing high, medium, or low efficiency and effectiveness, including cases where SMP adoption does not translate into expected outcomes. Through semi-structured interviews, focus groups, and document analysis, the qualitative inquiry explores how strategy-environment alignment (Strategy-Fit) and resource utilization (RBV) influence SMP implementation. For example, it examines whether universities with well-aligned strategies but limited human or technological resources face implementation challenges, or whether institutions with strong resource bases achieve high efficiency regardless of environmental fit. Thematic analysis identifies enablers, barriers, and contextual factors shaping SMP effectiveness, addressing the "how and why" questions of the study.

Integration of QUAN and QUAL Strands

Integration occurs at the interpretation stage, synthesizing quantitative patterns and qualitative insights to generate a holistic understanding of SMP, efficiency, and effectiveness. Quantitative findings inform qualitative sampling and guide inquiry into cases that demonstrate high or low alignment or resource utilization. Qualitative data explain statistical trends and reveal institutional mechanisms, bridging gaps between observed performance and theoretical expectations from Strategy-Fit Theory and RBV. For example, if SEM shows a positive association between strategy alignment and effectiveness, qualitative exploration may reveal that specific leadership practices, resource allocation decisions, or governance structures mediate this relationship. Conversely, RBV perspectives may explain why universities with unique resources

achieve superior efficiency even under suboptimal strategic alignment. This integration ensures that conclusions are theoretically grounded, empirically robust, and contextually relevant, producing actionable insights for improving strategic management practices in Ethiopian comprehensive universities.

In summary**,** by aligning the sequential QUAN → QUAL research approach with Strategy-Fit Theory and RBV**,** the study captures both the structural and resource-based determinants **of** SMP performance. The quantitative strand identifies measurable patterns of strategy adoption, alignment, and resource utilization; the qualitative strand contextualizes and explains these patterns; and the integrated analysis provides a comprehensive, theory-driven understanding of how SMP contributes to efficiency and effectiveness in Ethiopian higher education institutions.

3.4. Data Source

Mixed research data is processed in a data-driven manner (Mulisa, 2022 and Lu & Taghipour, 2025). The study focused on public comprehensive universities in Ethiopia, which are legally mandated to fulfill the tripartite mission of teaching, research, and community engagement. These institutions operate under increasing accountability pressures from government, society, and global ranking systems. Thus, in this study, to pick acceptable data sources and make them understandable, comprehensive universities were geographically classified into four directions: Northern, Southern, Western, and Eastern. Eight comprehensive institutions were chosen randomly from the four directions. As a result, Selale University from the north; Wachemo, Werabie, and Bule hora from the south; Odabultum and Madda-walabu from the east; and Mettu and Gambella comprehensive universities from the west were selected as the study's data sources. Here, the researcher acknowledges that only Selale University was selected from the northern direction as a target institution due to the current country's situation.

Both primary and secondary sources were utilized to acquire inclusive data for the study. Primary data were collected from designated managers/leaders and employees/staff using questionnaires, and interviewees (from top management, middle management, heads of development planning and budget units, and MoE directors and senior experts). Similarly, primary data was obtained from student union representatives through focus group discussions. Besides, the new education and training policy, the 1994 education and training policy,

Education development Road map, Differentiation study document, ESDP-VI, 10 and five years development plan, proclamation No.1152/2018, annual plans, and reports concerning the performance of the plans were employed and analyzed as secondary data sources.

3.5. A Brief Overview of the Context of the Sample Universities

As designated prior, eight comprehensive universities were included as a sample of the study, namely Wachemo, Werabie, Selale, Odabultum, Madawolabu, Metu, Gambella, and Bule Hora universities. Geographically, the eight comprehensive universities are located in various parts of the country. The following subsection highlights the contexts of each university briefly.

Wachemo University (WCU) is one of the public comprehensive institutions, located 232 kilometers southwest of Addis Ababa and founded in 2012 G.C. The university specified its motto, "*Let your light shine in the society*." The main and Durame campus, as well as the Nigist Eleni Mohamed Memorial Comprehensive Specialized Hospital are its three sites. It also has seven facilities for agricultural and technology transfer, as well as seven centers for teaching and learning. The organization has been striving hard to fulfill its mission in community service, teaching and learning, and research. It continues to produce competent and productive labor. At G.C. Wachemo University, which aims to rank among the top ten universities in Ethiopia and become a house of excellence by 2025, the four primary areas of concentration for future development are agro-processing, sustainable energy, indigenous knowledge, green tourism, and integrated town development. As of 2024–2025, the university employed 2,957 academic staff members and had 13,535 students enrolled in 73 undergraduate and 73 graduate programs split throughout seven colleges for regular and continuing education. The institution prioritizes academic quality, equity, and fairness in order to achieve its mission.

Werabie University (WRU) is a fourth-generation university founded in 2016. It is located 172 kilometers southwest of Addis Ababa in the rapidly expanding Werabie town, which is 22 years old. The university specified its motto of "*knowledge for excellence*." The university has been striving hard in main tasks of HEIs, such as teaching, research, and community services, with a vision of being one of the best universities in Ethiopia in 2020 E.C. The government's determination to improve access to high-quality higher education and guarantee a fair distribution of higher education across the nation served as the foundation for the universities

founding. In 2024/25, with five colleges, one institution, two schools, and 47 departments, the university serves over 5787 students in regular and continuous education programs. Under different directorates, it employed 347 support staff members and over 900 academics. With the goal of ranking among the top five comprehensive universities in Ethiopia by 2020 E.C., it has been striving hard in the areas of teaching, research, and community service. The university's objective also includes undertaking demand-driven research and providing diversified community services, as well as generating knowledgeable and talented graduates who can significantly improve and grow our society.

Selale University (SLU) is one of the public comprehensive universities that was established in 2016 as per Proclamation Article No. 650/2008 and is situated at Fitche, 114km away from the capital, Addis Ababa, in the North Shewa Zone of the Oromia Regional State, Ethiopia**.** The university has three campuses, viz., General Tadesse Birru (main) Campus, Abebech Gobena (Health Science) Campus, and Ganda Farda Campus, which is under construction. Selale University has a vision of aspiring to be a foremost comprehensive university in the nation by 2030 G.C. It has a mission to create knowledgeable and innovative graduates in varied fields of study, undertake problem-solving research, transfer technologies, and provide need-driven community services. The university comprised five colleges and thirty programs in undergraduate programs, such as business and economics, social sciences and humanities, agriculture and natural resources, natural sciences, and health sciences. The university serves 7216 students with its 1077 academic and 310 administrative staff and runs 30 programs/departments under six colleges in 2024/25.

Oda Bultum University (OBU) is one of the newly established public comprehensive universities located in eastern Chiro, West Hararghe Zone, Oromia Region, Ethiopia, which was established in 2015 by decree No. 322/2014 of the Council of Ministers of the Federal Democratic Republic of Ethiopia. It is located 326 km southeast of Addis Ababa, the capital city of Ethiopia. Oda Bultum University has seven colleges, two institutes, and one school; 42 undergraduate regular programs; 6 undergraduate continuing education programs; and 2 summer programs. The university has more than 926 academic staff and 340 administrative support staff, serving 5,595 students in the 2024/25 academic year. The university set a vision of striving to be the leading center of excellence in the country and East Africa in agro-industry and land

resources by 2035. Its mission is to create knowledgeable graduates, conduct problem-solving research, and offer demand-driven and transformative community services. As a public higher learning institution, Oda Bultum University has set itself core accountabilities, with a focus on producing ethical, competent, and qualified graduates. As its focus area, the Oda Bultum area is known for its high-quality agricultural products coffee, honey, and meat that fetch the highest prices at local and international markets and its charitable society.

Madda Walabu University (MWU) is one of the public comprehensive universities founded in 2006, located in the town of Robe, about 430km southeast of the capital city, Addis Ababa. The university has three campuses located in Robe, Goba, and Shashemene. The university has 46 undergraduate and 28 postgraduate programs. In 2024/25, the university has 8 colleges, 4 schools, and 1 institute, serving 7987 students with 1547 academic personnel. The university specified the motto of becoming "*Excellence through diversity."* By 2025, the University hopes to be among the top five universities in the nation for addressing societal issues. In order to promote socioeconomic development in the nation, the university's mission is to generate skilled, enterprising, employable graduates as well as demand-driven research outputs and need-based community services through pertinent and high-quality education, research, training, and consulting services. MWU is situated in a region rich in tourist destinations and agricultural production, and harvesting twice a year paves the way for the university and agricultural production and harvesting.

Metu University (MaU) with the stated motto, "We are dedicated to serving the community," It is a third-generation public university in Ethiopia. It was founded in 2011 G.C. in an evergreen area rich in untapped natural resources in accordance with House of Ministers Regulation No. 238/2011 to satisfy the rapidly expanding demand for highly qualified professionals in the nation. The university is situated in Metu town, Oromia Regional State, in southwest Ethiopia, some 600 kilometers from Addis Ababa, the country's capital. By 2030, the university outlined its goal to become a renowned or acknowledged institution in the study, research, and community service domains of contemporary agricultural and natural science. Its goals include producing good and capable graduates, carrying out research that solves problems, delivering or providing research-based community services, and forming alliances and partnerships with both domestic and foreign academic institutions, research facilities, and businesses. Since its

founding, the university has achieved significant and varied strides in research, training, and community service. In 2024/25, the university is serving 12223 students with 1107 academic personnel. It has also increased the number of qualified personnel through undergraduate and graduate training. Excellence in research and technology transfer, community service and participation, international collaboration and partnerships, institutional leadership reform, and good governance are all ongoing goals for Metu University. For the benefit of local communities' general economic development and job opportunities, the University is aggressively pursuing partnerships with key food processing industries, including the production and processing of honey, coffee, tea, and spices, both domestically and abroad.

Bule Hora University (BHU): In order to contribute to the national endeavors to promote quality and excellence in teaching, learning, research, community services, administrative functions, and good governance, Bule Hora University was founded in 2008 G.C. and links the advancement of natural and cultural resources with technology and its uses. This university is situated in Bule Hora woreda, West Guji Zone, Oromia Regional State, 470 kilometers south of Addis Ababa. The university established "strive for excellence" as its motto. In order to raise the standard of instruction, research, and community services, Bule Hora University is working with both domestic and international universities as well as governmental and non-governmental institutions to offer a variety of services. Aiming to become one of Ethiopia's top public HEIs by 2025, the university has highlighted its areas of expertise, which include mining, animal husbandry, and indigenous knowledge. In 2024/25, the institution has 5407 students enrolled across six colleges, along with 1605 academic staff members working in seven colleges and one institute, offering a total of 161 programs.

Gambella University (GmU): Approximately 766 kilometers from Addis Ababa, in Gambella town, the seat of Gambella People National Regional State (GPNRS), sits Gambella University (GmU), one of the public comprehensive institutions. In order to create middle-level agricultural developmental agents, the former Ministry of Agriculture and Rural Development, GPNRS, and the Bureau of Agriculture and Rural Development organized and oversaw the establishment of the institution in 2002 as Gambella Agricultural, Technical, Vocational, and Educational Training (GATVET) College. Over 1,950 students completed the diploma program's animal

science, natural resources, plant science, and cooperation departments over the course of 10 years (2002–2012) (level IV).

Additionally, the certificate program produced over 493 general agricultural graduates. However, it was affiliated with Metu University and became the College of Agriculture and Natural Resource campus from 2012 to 2013–14, with the departments of Animal Science, Plant Science, Natural Resource Management, and Agricultural Economics, according to an agreement reached among the Ministry of Education and regional stakeholders. Under Proclamation No. 317/2006, the Council of Ministers designated Gambella University an independent entity and took on its institutional mandate. With its stated motto, "We are with the community," Gambella University's founding in 2014 immediately marked a new episode in the history of the Gambella Region and its citizens.

By 2030, the university hopes to rank among Africa's leading academic and scientific institutions. Additionally, it is steadfastly dedicated to delivering top-notch instruction and training to generate capable and moral citizens, as well as to advancing contemporary technology and problem-solving researchers who support regional and national growth. There are currently six schools, thirteen departments, and thirty-one undergraduate programs at the university. Furthermore, the university has already started three postgraduate programs (Master of Business Administration, development studies, and project planning and management) in partnership with the Green Research Development Institute (GRDI) and one postgraduate program in animal production on its own.

According to the university's strategic plan, it aims to "be one of the acknowledged academic and research centers in Africa by 2030" through the implementation of four key strategic pillars: good governance, research and technology transfer, community service and partnership, and educational quality and relevance. The ten- and five-year development plans that each target comprehensive university created will be put into action between 2021 and 2030 and 2013 and 2023. The development plan that was created to be used for the strategic years spanning from 2013 to 2018 and 2021 to 2025 has been put into action. The goal comprehensive universities created various visions to be accomplished by the end of 2030, as previously mentioned. Additionally, the goals of the target comprehensive universities are determined by their unique locations, the requirements of the populations within their catchment areas, and their legislative responsibilities. Similarly, each of the target comprehensive universities listed their mottos in

their development plan paper. In 2024/25, Gambella University has 2395 students enrolled in five colleges and one school, with 898 academic staff members.

3.6. Study population, Sampling Techniques and Sample Size

3.6.1 Study Population

A population involves a comprehensive list of issues, persons, and subjects (Ahmed, et.al, .2023), "the totality of all elements" (Wiersma & Jurs, 2005), all informants, research elements, or anything with the qualities that the investigator needs to draw a scientific investigation into the study (Richard & Towne, 2002 and Al-Ababneh, 2020). The population included key strategic actors at public comprehensive universities in Ethiopia which includes top managers and employees at all levels at the target universities. These consist of the senior management team (university president), middle-level managers (college deans), functional managers (directors) including plan and budget development, academic and supportive staff members, and student unions from comprehensive universities. Moreover, it included governance layers allowed examination of vertical alignment in strategic management practices which consists of the institutional structure and leadership capacity building director and reform director, as well as senior experts from the federal Ministry of Education (MoE), which served as the primary data source for the study.

Here, the main reason to include top management and college deans was based on the fundamental assumption that the top and middle management bodies have direct responsibility for formulating strategies, implementing the developed strategies, and monitoring and evaluating the efficient and effective execution of the strategies at the university and college level, as well as delivering the required guidance and provision for the employees on the implementation of the strategies, tasks, and activities, as well as overseeing that they discharge the duties assigned to them properly(Creswell, 2012).

Likewise, the inclusion criteria for department heads from various units of the universities, academic and supportive staff was that they are work force that directly impacts the universities ability to attain their long-term goals and maintain a competitive edge through implementing strategies and developing regular and timely reports. Also they have better knowledge,

information, roles, and direct involvement in the implementation of SM practices in their respective universities. Moreover, the inclusion of students' union representatives as main stakeholders of the universities is to generate critical evidence about their engagement in strategy development, implementation, and measuring the performance of strategies. Similarly, the inclusion of the MoE directors and senior experts as key data sources is because the MoE is accountable for formulating, monitoring, and evaluating the execution of policies, programs, and policy directions; setting and enforcing standards; providing skill development programs for HEI management at the local and international levels; and providing services that support higher education governance and strategic management. The exclusion criteria were applied to ensure that only respondents with sufficient institutional experience, strategic exposure, and data completeness were included, thereby enhancing the methodological rigor and internal validity of the study.

3.6.2 Sampling Design/Techniques

Mixed-method sampling design combines existing quantitative and qualitative methodologies in novel ways to solve research concerns (Teddlie & Yu, 2007). This technique enables the researchers to utilize the capabilities of both quantitative and qualitative methodologies, increasing the depth and breadth of their discoveries as well as enhance creative integration of different sampling techniques. By creatively integrating different sampling strategies, they can more effectively address complex basic questions. As a result, in this study mixed methods sampling or both probability and non-probability sampling techniques was employed. First, among public research, comprehensive, applied, technology and education universities, comprehensive universities were selected using purposive sampling to capture difference in institutional age and size, geographical location and resource endowment. This enhances analytical generalization rather than statistical generalization, and then eight comprehensive universities were chosen using stratified random sampling. The primary assumption for conducting this study in comprehensive universities is that almost all comprehensive universities have developed three consecutive strategic plans, as well as ten- and five-year development plans, since their inception, implying that they have significant experience and knowledge in developing strategies, implementing those strategies, and monitoring and evaluating progress

toward organizational goals. As a result, it is vital to explore how comprehensive universities efficiently and successfully use strategic management principles.

Purposive sampling also, used to choose top management, middle-level managers of the universities (college deans), development planning and budgeting unit heads, directors and senior experts from MoE, and students' unions. Participants for the qualitative phase were purposively selected based on their relevance to issues emerging from quantitative findings. The selection focused on leaders, directors, and experts capable of explaining survey results related to weak implementation practices, structural alignment challenges, and monitoring and evaluation gaps. The basic assumption to employ purposive sampling is to address explicit drives related with addressing a study's questions and allows picking up specific environments, individuals, or actions that are intentionally designated that focus on breadth and important information generated by sampling units (Tashakkori & Teddlie, 2003a: 713).

Moreover, proportional stratified random sampling was utilized to pick up department heads, senior academic staff, lower-level managers, and support staff members from target universities to ensure proportional representation. Also, stratified random sampling is used because it offers a way to break a population up into smaller subgroups (called strata) to increase the accuracy of high-level survey results, can be extrapolated from the sample to the population with a calculable margin of error, and gives every unit in the population an equal chance of being chosen (Shadish et al., 2002).

3.6.3. Sample Size

Brown (2006) asserts that "sample size" influences two statistical characteristics: the accuracy of the estimates and the study's capacity for conclusion-making. Thus, in this study to determine the sample size from the employees/staff, Yamane(1967) as cited in Kassahun's (2018) sample size determination formula was used, where "n" symbolizes the minimum required sample size, "N" represents the population size, and "e" symbolizes the level of precision (a margin of error (e=0.05) means 95% confidence levels).The formula is as follows: $n = N / (1 + N (e^2))$ to calculate the sample size from each target population. Figure 3.1 shows the sample size designed utilizing the formula ($n = N / (1 + N (e)^2)$) for each target population. To this purpose, 408 academic staff and 160 supportive members were chosen as respondents from a total population

of 12140 senior academic staff & 3200 supportive staff (15340) and 176 line managers (department heads and directors) utilizing proportional stratified random sampling technique as described below. Also 75 participants were selected purposively who participate in interview and focus group discussions.

<u>Academic and supportive Staff</u>
n=N/ (1+N (e) 2)
n = 15340/ 1+15340× (0.05)2)
N=15340/1+26/27
n = 15340/ 27
n= 568

<u>Department heads + Directors</u>
n=N/ (1+N (e) 2)
n = 706/ 1+706× (0.05)2)
N=706/1+3
n = 706/ 4
n= 176

Table 3.1.Sample Determination

Targeted Comp. University	Top management			Middle management		Department heads & directors		Students Unions		Planning Heads		MoE director &experts		Academic & supportive staff (N / (1 + Ne^2)			Total sample size
	Sam.pling Technique	Total pop.	Sam. size	Total Pop	Sam. size	Total Pop.	Sam.Size	Total pop.	Sam. size	Total Pop.	Sample size	Total pop.	Sam. size	Tech. Sam.	Total pop.	Sam. size	
Wachemo	Purposive	1	8	6	4	90	22	9	3	1	1			Simple Random	3390	568	
Werabie		1		6	4	88	22	9	3	1	1				1474		
Mada wolabu		1		6	4	90	22	9	3	1	1				2010		
Odu bultum		1		6	4	87	22	9	3	1	1				1503		
Mettu		1		6	4	88	22	9	3	1	1				1597		
Gambella		1		6	4	88	22	9	3	1	1				1838		
Bulehora		1		6	4	87	22	9	3	1	1				1941		
Selalie		1		6	4	88	22	9	3	1	1				1587		
MoE		-	-			-	-			-	-	15	3	-		-	
Total			8		32	706	176	72	24	8	8		4		15340	568	**819**

<u>Data Source</u>: Ministry of Education Abstract (EMIS) (2024/25).

3.8. Data Collection Method and Data Collection instruments

3.8.1. Data Collection Method: Sequential Explanatory (QUAN → QUAL) Design

In this study, a sequential explanatory QUAN → QUAL mixed-methods design was employed to generate a rigorous and contextually grounded understanding of strategic management practices and their influence on organizational efficiency and effectiveness in comprehensive universities

in Ethiopia. The data collection process was organized in two analytically connected phases, with priority given to the quantitative strand, followed by a qualitative phase designed to explain and elaborate the statistical results and then integrated thematically. The logic of this sequence is that measurable structural relationships among strategic management dimensions and performance outcomes are first established, and then interpreted within the lived institutional realities of Ethiopian higher education.

Quantitative data Collection (QUAN): Measurement of Latent and Observed Variables: Quantitative data collection involved the administration of a structured survey questionnaire designed to measure latent constructs representing both strategic management practices and organizational performance outcomes. The instrument was theoretically grounded in Strategy Fit Theory, the Resource-Based View, and institutional theory ensuring conceptual alignment between strategic processes and performance consequences.

Strategic management practices were operationalized as four latent constructs: Environmental Scanning (ES), Strategy Formulation (SF), Strategy Implementation (SI), and Monitoring and Evaluation (M&E). Each construct was measured through multiple observed indicators. Environmental Scanning captured the extent to which universities systematically analyze internal capabilities (SWOT) and external environmental dynamics (PESTEL), including assessing competitive advantages, students need assessment, stakeholder expectations, and assessment of national educational trends. Strategy Formulation assessed clarity of mission alignment, strategic goal specificity, developing alternative strategies, selecting the best strategies, setting quantitative targets, setting smart objectives, prioritizing tasks and allocating adequate resources. Strategy Implementation measured delegating authority to subordinates, restructuring the institution for implementation, developing policies, guidelines and plans, rewarding employees, allocating adequate resources for and change management mechanisms. Monitoring and Evaluation assessed the existence of indicators for performance measurement systems, functionality of stakeholders in M&E, conducting periodical performance evaluation, feedback mechanisms, regularly collecting reports and corrective action procedures.

Organizational performance was conceptualized as two distinct but related latent constructs: Efficiency (EFFI) and Effectiveness (EFFE). Efficiency was measured through observable indicators such as optimal resource utilization, cost efficiency, timeliness of service delivery,

budget absorption rates, and process turnaround times. Effectiveness was measured through indicators reflecting goal attainment and institutional impact, including graduation rates, research productivity, graduate employability, stakeholder satisfaction, accreditation outcomes, and achievement of strategic objectives.

All items were measured using Likert-type scales to enable latent variable modeling. The survey targeted department heads, line managers, and senior administrative staff who are directly involved in strategic processes. The quantitative phase generated empirical evidence on the structural relationships between environmental scanning, strategy formulation, strategy implementation and monitoring and Evaluation and the performance constructs (efficiency and effectiveness), and identified significant, weak, or inconsistent associations requiring deeper inquiry.

Qualitative Data Collection (QUAL): Explaining Latent Constructs and Statistical Patterns

Following preliminary quantitative analysis, a second qualitative phase was conducted to explain, contextualize, and refine the statistical findings. Data were collected through semi-structured interviews, focus group discussions, and policy document analysis. Semi-structured interviews were conducted with top and middle level leaders, and development plan and budget unit heads that is directly responsible for strategic management practices. The interview protocol was developed directly from quantitative results, particularly focusing on unexpected relationships, non-significant paths, and discrepancies between efficiency and effectiveness outcomes. The interviews explored how strategic decisions are enacted in practice, how institutional culture influences implementation, and why certain strategic dimensions produce differential performance effects.

Focus group discussions were conducted with student's union representatives to capture collective experiences regarding strategic implementation and monitoring processes. These discussions provided insight into operational challenges, communication dynamics, resource constraints, and institutional commitment to strategic priorities. The group setting enabled exploration of shared perceptions and divergent viewpoints that may not have been evident in survey responses. In addition, institutional strategic plans, ESDPs, education development roadmap, education and training policy, proclamations, annual performance reports, monitoring

and evaluation frameworks, budget documents, and relevant national higher education policy documents were systematically reviewed. Document analysis enabled triangulation between formally articulated strategies and actual performance outcomes, thereby strengthening construct validity and contextual credibility.

***Integration of QUAN and QUAL Data Collection*:** Integration in the sequential explanatory QUAN → QUAL design was achieved through a clear connecting and explanatory procedure. The quantitative findings served as the foundation for the qualitative phase. Specifically, results from the survey analysis guided the selection of interview and focus group participants and informed the development of qualitative protocols. Areas showing statistically significant, weak, or inconsistent relationships between strategic management practices (ES, SF, SI, and M&E) and the latent constructs of efficiency (EFFI) and effectiveness (EFFE) were deliberately targeted for further exploration. The quantitative phase established the structural measurement of the key constructs by operationalizing strategic management dimensions and performance outcomes as latent variables reflected through observed indicators. The subsequent qualitative phase was designed to explain these statistical patterns by examining how strategic processes are enacted, interpreted, and experienced within comprehensive universities in Ethiopia. In this way, qualitative data provided contextual meaning to the numerical relationships identified in the quantitative strand.

Particular attention was given to clarifying why certain observed indicators cohered strongly within specific latent constructs, why some strategic practices demonstrated stronger influence on efficiency than on effectiveness (or vice versa), and how institutional conditions shaped performance outcomes. Strong statistical effects were examined to identify enabling mechanisms, while weak or inconsistent findings were explored to reveal contextual constraints, implementation challenges, or alignment gaps. Accordingly, the qualitative phase functioned explicitly as an explanatory extension of the quantitative results rather than as an independent inquiry. Integration was therefore embedded in the research procedure itself, ensuring coherence between phases and strengthening the overall interpretive validity of the study.

***Methodological Rationale*:** The sequential explanatory QUAN → QUAL design was adopted to ensure methodological rigor, theoretical alignment, and contextual depth in examining how strategic management practices influence efficiency and effectiveness in comprehensive

universities in Ethiopia. In the quantitative phase, Environmental Scanning (ES), Strategy Formulation (SF), Strategy Implementation (SI), and Monitoring and Evaluation (M&E) were operationalized as latent constructs measured through observable indicators, alongside Efficiency (EFFI) and Effectiveness (EFFE) as performance constructs, thereby providing structured and statistically grounded evidence of their relationships. The subsequent qualitative phase, through interviews, focus group discussions, and document analysis, contextualized and explained these statistical patterns by examining how strategic processes are enacted and experienced within institutional and policy environments. By integrating structured measurement with contextual interpretation, the design strengthened construct validity, enhanced explanatory depth, and ensured that efficiency and effectiveness were understood not merely as numerical outcomes but as multidimensional organizational phenomena embedded within strategic management practices and institutional realities.

3.8.2 Data Collection Instruments

3.8.2.1 Questionnaire

The questionnaire was applied as the principal instrument for collecting quantitative data on strategic management practices and institutional performance in comprehensive public universities. The instrument incorporated both closed-ended and open-ended items to obtain quantitative evidence and supplementary qualitative insights from respondents (Fischer, 2005; Teddlie & Tashakkori, 2009). Questionnaires were distributed to department heads, academic staff, line managers, and supportive staff, later categorized as managers/leaders and employees/staff.

The questionnaire consisted of three sections. The first section collected demographic information, including gender, work experience, qualification, position, academic rank, field of study, and training related to strategic management. The second section employed five-point Likert scale items to assess respondents' levels of agreement regarding strategy formulation, implementation, monitoring and evaluation, barriers to strategic management practices, institutional commitment, and institutional performance indicators. The scaling categories ranged from "1 = strongly disagree" to "5 = strongly agree" (Teddlie & Tashakkori, 2009). These items were developed based on the major themes presented in the conceptual framework. The third section included open-ended questions that enabled respondents to express their experiences,

views, and perceptions regarding strategic management practices in their own words. Combining both question formats strengthened data triangulation and enhanced the comprehensiveness of the analysis.

Protocol for Questionnaires: Questionnaires were applied as the main quantitative data collection instrument to obtain information from academic leaders, administrative staff, and employees regarding strategic management practices in comprehensive public universities. Before administration, official permission letters were secured and presented to university presidents to obtain institutional approval and access to respondents. Eligible participants were then identified from colleges, schools, and administrative units based on the predetermined sample size.

The questionnaires were administered through direct face-to-face distribution with the support of trained volunteer assistants. Prior to administration, respondents were informed about the purpose of the study, voluntary participation, and confidentiality of responses. The instrument was distributed to selected respondents in their respective work units and collected after completion during the scheduled data collection period. Employees who were absent during data collection were excluded from participation. Returned questionnaires were reviewed daily to check completeness, consistency, and response rates. Incomplete or improperly filled questionnaires were excluded from the final dataset and replaced using respondents selected through a lottery method from the remaining sampling frame. Findings obtained from the questionnaire responses were later used to guide the qualitative interview phase by identifying issues requiring further clarification from top-level university managers.

3.8.2.2 Interviews

Semi-structured face-to-face interviews were applied to collect qualitative data from top and middle management, including college deans, development planning and budget heads, and Ministry of Education directors and senior experts. Interviews were selected because they enable direct interaction with respondents and provide opportunities to clarify unclear responses during data collection (Li & Liu, 2021). In line with mixed-methods procedures, the interview guide was refined after the quantitative phase to ensure explanatory integration between quantitative and qualitative findings (Toyon, 2021).

The interviews focused on strategic management practices, particularly environmental scanning, strategy formulation, implementation, monitoring and evaluation, strategic leadership, institutional autonomy, accountability, and contextual challenges affecting strategy execution. Probing questions were employed to obtain detailed responses and deeper reflections from participants. Semi-structured interviews were preferred because they allow participants to express their experiences, perceptions, and institutional practices in their own words (Teddlie & Tashakkori, 2009).

Interview Protocol: The study employed in-depth, face-to-face interviews lasting approximately 40–60 minutes. Preliminary interview guides were prepared before the quantitative phase; however, the interview questions and probing strategies were refined based on emerging quantitative findings to ensure explanatory alignment between the two phases.

Before data collection, the researcher secured formal authorization letters from the Ministry of Education and Addis Ababa University, College of Education and Language Studies, Department of Educational Planning and Management. Interview participants were then purposively contacted to request their consent and arrange convenient interview appointments. At the beginning of each interview, the researcher introduced the purpose of the study and explained ethical considerations, including voluntary participation, confidentiality, and the right to withdraw at any stage. This helped establish rapport and create a respectful interview environment. Interviews were conducted at agreed times and locations using the interview guide, while participants were encouraged to express their views freely. Follow-up questions were used to obtain clarification and deeper explanations where necessary.

Participants' responses were documented through detailed handwritten notes during the interviews. To ensure accuracy and completeness, the researcher reviewed and expanded the field notes immediately after each interview session. The same procedure was consistently followed across all participating universities. Due to participants' preferences and contextual considerations, interviews were conducted without audio or video recording.

Table: 3.2 Qualitative Follow-up Interview Questions Developed from Quantitative Findings

Major Quantitative Findings	Purpose of Qualitative Follow-up	Interview Questions
Environmental scanning was moderately practiced but not institutionalized (M = 2.75)	To explain why environmental scanning remains weakly institutionalized despite its recognized importance	**1.** The survey findings indicate that environmental scanning practices are moderately implemented but insufficiently institutionalized across comprehensive universities. In your view, what organizational, leadership, and resource-related factors hinder the institutionalization of systematic environmental scanning? **2.** How are internal and external environmental changes currently identified and incorporated into strategic planning and institutional decision-making, and what challenges affect this process?
Strategy formulation was overall weak and insufficiently institutionalized (M = 2.48)	To understand the causes of weak strategic formulation practices	**3.** The quantitative findings revealed weak and inadequately institutionalized strategy formulation practices. What factors contribute to these weaknesses in strategic planning within your university? **4.** How does the current strategy formulation process, including stakeholder participation and leadership involvement, influence ownership, commitment, and successful implementation of institutional strategies?
Strategy communication relies mainly on traditional approaches while digital channels remain underutilized	To explain communication gaps and limited use of modern systems	**5.** The survey findings suggest that universities rely mainly on conventional communication mechanisms while underutilizing digital communication platforms. Why does this occur, and what barriers limit the adoption of modern communication systems? **6.** How does the current strategy communication system influence employees' awareness, participation, and commitment to implementing institutional strategic plans?
Strategy implementation was moderate-to-low (M = 2.49)	To explain implementation barriers and institutional challenges	7Quantitative findings indicate moderate-to-low levels of strategy implementation. What are the major organizational, leadership, financial, and human resource factors that hinder effective implementation of institutional strategies? **8.** In your experience, why do some strategic initiatives fail to achieve their intended objectives despite the existence of formal strategic plans?
Critical Success Factors for Strategic Management	To understand reasons for weak institutional performance outcomes	**.** The survey findings show that the efficiency and effectiveness of strategic management practices vary considerably across universities. What factors do you consider most critical for successful implementation of strategic management practices? **10.** What improvements in leadership, organizational capacity, resource allocation, employee engagement, or governance would strengthen the effectiveness of strategic management practices in comprehensive universities?
Monitoring and Evaluation (M&E) practices showed only moderate implementation (M = 2.68)	To identify weaknesses in monitoring and evaluation systems	**11.** The quantitative findings indicate that monitoring and evaluation practices are only moderately implemented. What organizational or institutional factors limit the effectiveness of monitoring and evaluation systems in your university? **12.** How are monitoring and evaluation findings utilized for organizational learning, accountability, evidence-based decision-making and corrective action during strategy implementation?

The qualitative interview questions were refined following quantitative data analysis in order to explain, elaborate, and contextualize major survey findings. Particular emphasis was given to areas where quantitative results revealed weak, moderate, inconsistent, or insufficiently institutionalized strategic management practices. Accordingly, the qualitative phase served an explanatory function consistent with explanatory sequential mixed-methods research design.

3.8.2.3 Focus Group discussions (FGDs)

Focus group discussions (FGDs), involves asking questions informants about their views attitudes, beliefs, outlook or ideas in which a small group of participants were involved (Akyildiz & Ahmed, 2021). Focus group discussions (FGDs) were used to capture collective views from students' union council representatives. In this study students' union council representatives were involved on the focus group discussion to gather information views, experiences, and opinion as well as their expectations about the strategic management practices and their engagement on strategy formulation, strategy execution and the performance measurement of the planned activities in their respect universities.

Focus Group Discussion Protocol: This subsection describes the procedures followed to collect data through focus group discussions (FGDs). Initially, the researcher contacted the student council offices **o**f the eight sampled universities with the support of the respective president's offices. After presenting the official cooperation letter, the researcher introduced himself, explained the purpose of the study, and clarified the ethical considerations, including voluntary participation and confidentiality. Subsequently, the names and contact details of the student union chairpersons were obtained.

Each student union chairperson was then requested to nominate three student union members who had relatively greater exposure to strategic management practices and longer experience at the university. The researcher contacted the nominated students, most of whom agreed to participate. The FGDs were scheduled at a convenient time outside class hours, often on Saturday, and were conducted in the student council offices. At the beginning of each session, the researcher welcomed the participants, briefly introduced the study, assured them of confidentiality, and invited them to select a facilitator from among themselves to guide the discussion. The discussion followed a set of pre-prepared FGD guiding questions, while the

researcher primarily observed and recorded the key points through handwritten notes. The discussions were conducted in Amharic, which enabled participants to express their views openly. The information obtained from the FGDs provided valuable qualitative insights and was used to triangulate findings from other data sources. Each session concluded with the researcher expressing appreciation for the participants' active involvement.

3.8.2.4 Document Review

The document was analyzed to provide a context conducive to implementing existing national and international expertise in strategic management in HEIs. First, a crucial examination of official papers directly connected to strategic management methods was conducted. As a result, relevant documents such as, the new education and training policy, Ethiopia's 1994 Education and Training Policy, both the ten and five years development plan of target universities and the Ministry of Education, Higher Education Proclamation No. 1152/2019, ESDP I-VI, the education development road map, annual plans, Balanced scorecard (BSC) training modules, and reports of various programs (MDGs, SDGs, ESDPs) and others were reviewed. In addition, related literature was thoroughly reviewed and studied to triangulate and supplement the core data findings. There is one item to consider here. The study attempted to summarize prevailing national policy directives and their consequences for the content and approaches of strategic management practices in comprehensive universities. As a result, the above-mentioned documents were only briefly reviewed, with their recommendations summarized in chapter two to support the facts studied. The document analysis enabled methodological triangulations.

Protocol for Document Analysis: This subsection describes the procedures followed to collect evidence through document analysis. After communicating with the top management of the target universities and obtaining permission, the researcher identified and collected relevant documents related to the study, including policy documents, ESDPs, institutional reports, and the Ten-Year Development Plan. Most of the documents were obtained in soft and printed formats from the Federal Ministry of Education and the official websites of the respective universities.

The collected documents were carefully reviewed to develop a general understanding of strategic management (SM) practices and related influencing factors in the universities. During the review process, notes were taken and organized into two categories: information directly relevant to the

study and issues that required further clarification during interviews. Finally, the information obtained from document analysis was organized according to the research questions and conceptual framework of the study and was primarily used to triangulate findings from other data sources, particularly questionnaire responses.

3.9. Ensuring Quality of Data

The quality of data is vital for the study to have a clear thoughtful of approaches and combined process to assure the collected data meet a well-organized quality level and confirm that the characteristic “value” of the information unavoidably changes over time and this was assured by accompanying both reliability and validity tests (Fu & Easton, 2017). Thus, reliability and validity were accompanied and described self-reliantly as follows.

3.9.1. Validity Test

Validity involves the degree to which a study correctly examines the precise notion that the researcher is aiming to test (Kirakowski, 2015). As a result, for this study among the two types of validity, *content and face* validities were conducted and tested.

Content Validity: Content validity was verified through employing two approaches: namely “experts’ comments” and “pilot testing”. Each of the approaches was presented in detail as follows.

Experts’ Comments as Validity Test: Fu and Easton (2017) suggested that all data collection instruments should be value-laden, explicit, and have well-defined quality levels to acquire the necessary evidence. For this study, a content validity test was performed utilizing "experts' comments." To accomplish this, six academic staff members, including the research director from Bonga Comprehensive University, who have extensive research experience, were given all of the tools (questionnaire, interview, and focus group discussion guides) to rate the items as "appropriate," "useful but not appropriate," or "not relevant to the issue" and then, the items judged "appropriate" were then kept in their original state. Items classified as "useful but not appropriate" were reworked. Items assessed as "not relevant" were omitted and substituted with more relevant items. Individuals were also asked to make general ideas on the size and simplicity of the text (language) in the tools. As a result, all valuable recommendations and relevant revisions were carefully considered in order to improve the instruments' content validity.

3.9.2.Pilot Testing

As suggested by Fu & Easton (2017), pilot tests can help the researcher to identify and resolve data quality issues or problems before conducting the full-scale research (Creswell, 2009). This was accomplished by distributing the questionnaire to 33 employees/staff (5 department heads, 20 teachers, 2 college deans, 1 research director, and 5 senior experts) who work at Bonga Comprehensive University. The fundamental presumptions behind conducting a pilot study was determine the viability of the data collection methodology, identifying unforeseen obstacles, gathering data to determine acceptable sample sizes, and possibly saving time and money (Patton, 2002). This method was primarily intended for two purposes. First, ensure that the questionnaire is clearly understood, eliminate extraneous questions, logically correct, and physically complete, avoid ambiguity, and simplify complex terminology, as well as provide a general picture of strategic management practices in universities. Second, take notes to serve as value-laden questions throughout the interview and focus group discussions. This was used to revise and progress the overall content of the questionnaire and make the survey thorough for the chosen respondents. Consequently, I received comments and changed the questionnaire. As described above under data collection tools, the questionnaire's number of pages was decreased from ten to five. All elements that "misleading" the responders and/or were theoretically repeated were recognized, altered, or eliminated. The amended version of the questionnaire was understandable to all key informants (chosen from the colleges and departments participating in the study).

Face Validity

As presented by Fu & Easton (2017), face validity helps researchers determine if a test is measuring what it claims to measure without having to *conduct complex statistical analyses*. As designated above, face validity was observed by distributing the questionnaire to three senior lecturers from curriculum development who work at Bonga comprehensive university. Based on the comments forwarded by the curriculum experts reorganizing was done.

3.9.3. Test of Reliability (Internal Consistency) of the Questionnaire

According to Kirakowski (2015), "the reliability/ repeatability of a questionnaire are the capacity of the questionnaire to deliver the same findings when filled out by like-minded people under

similar conditions." Thus, a Reliability test was accomplished on the tools to define the degree to which repeated information may produce reliable results under the same conditions and with identical factors controlled in the study. The following table presents the internal consistency of the questionnaire in details.

Table 3.3 Test of Reliability

No	Constructed Measured	No. of items	Coef. of reliability
1	The practices of environmental scanning	6	0.76
2	The practices of strategy formulation	8	0.83
3	The practices of communicating strategies	8	0.74
4	Approaches to develop strategies	4	0.84
5	The efficient and effective implementation of strategies	6	0.81
6	Critical success factors influencing strategy implementation	8	0.79
7	The practices of M &E of the implementation of strategies	6	0.87
8	Internal factors influencing the implementation of SM practices	9	0.81
9	External factors influencing the implementation of SM practices	5	0.80
10	Total	59	0.81

Source: Survey Data (2024/25)

For this study, reliability test was computed by SPSS AMOS version 23 to assess the instrument reliability employing the Cronbach alpha coefficient test. The Cronbach's alpha coefficients yielded an acceptable value of 0.81. This suggests that the questionnaire items were deemed internally constant, dependable, and suitable for gathering the necessary data (Amirrudin et al. 2021).

Finally, questionnaires were produced in English language and replicated for information gathering, based on the number of sample population and the processes described above. The English version of the questionnaire was distributed to participants for two reasons. First, interpreting some technical terms (e.g., "strategy, strategy tools, scanning approaches," "strategic management," and "strategic plan") into Amharic was extremely difficult, leads to misrepresentation of unique definition on the part of some participants. Second, early secondary data analysis of the participant's' profiles at the target universities reveals that the vast majority of them have first-degree or higher educational degrees, as well as unique experiences. This was

also supported by the background analysis reported in Chapter 4 below. The second argument was one of the advantages and justifications for performing the research at comprehensive universities.

In conclusion, the methodological rigor or justification of using validity, reliability, and trustworthiness in an integrated design is to strengthen through use of validated survey instruments and reliability testing (e.g., Cronbach's alpha), triangulation of quantitative and qualitative findings, member checking and peer debriefing for qualitative data and transparent documentation of integration procedures. These strategies enhance the credibility and dependability of the integrated findings.

3.9.4. Assessment of Common Method Bias

To address common method bias (CMB), appropriate procedural and statistical measures were considered to minimize and assess its potential influence on the findings. First, several procedural remedies were applied during data collection. These included ensuring respondent anonymity, using clear and neutral wording of questionnaire items, separating measurement of independent and dependent variables within the instrument, and emphasizing that there were no right or wrong answers. Podsakoff et al. (2003) noted that these steps were taken to reduce evaluation apprehension and social desirability bias, consistent with recommendations.

Second, a statistical diagnostic test for CMB was conducted using Harman's single-factor test. All measurement items were loaded into an exploratory factor analysis without rotation. The results showed that the first factor accounted for less than 50% of the total variance, indicating that no single factor dominated the covariance among variables. This suggests that common method bias is not a serious concern in the dataset. In addition, the confirmatory factor analysis (CFA) model demonstrated excellent and good fit indices for all constructs and no evidence of a single latent factor capturing all indicators was observed, further supporting the absence of substantial common method variance. Overall, both procedural controls and statistical tests confirm that common method bias is unlikely to have significantly inflated the relationships among the study variables, and therefore the results can be considered robust and reliable.

3.10. Data Analysis Techniques and Presentation

Data analysis comprises analyzing, interpreting, triangulating, manipulating, and modeling data collected by analytical and logical reasoning in order to identify patterns, linkages, or trends (Proudfoot, 2023). This process is essential for making informed decisions that can drive strategic initiatives and improve overall performance. By leveraging various techniques, analysts can transform raw data into actionable insights that support organizational goals. In this study, a mixed-method data analysis entails combining statistical and thematic data analytic methodologies and procedures which consist of three major steps(Proud foot, 2023)..

3.10.1. Data Analysis

This study employed a sequential explanatory mixed-method design (QUAN → QUAL) to investigate strategic management practices in higher education, focusing on efficiency and effectiveness The design positioned quantitative analysis as the dominant strand, providing empirical measurement of constructs, followed by qualitative inquiry to explain and contextualize the findings. Both latent variables (unobserved constructs) and observed variables (survey indicators) were systematically analyzed, ensuring theoretical alignment and empirical rigor.

Latent and Observed Variables: Six latent constructs were identified and operationalized through multiple observed indicators derived from survey items. Environmental Scanning (ES) included six observed indicators: assessing SWOT analysis, examining PESTEL factors, evaluating competitive advantages, assessing student needs, analyzing stakeholders, and reviewing national educational trends. Strategy Formulation (SF) comprised eight observed indicators, including creating a strategic mission, setting strategic goals, developing alternative strategies, selecting the best strategies, establishing quantitative targets, formulating SMART objectives, prioritizing tasks, and allocating adequate resources. Strategy Implementation (SI) was measured using six observed indicators: delegating authority, restructuring the institution to support implementation, developing plans and guidelines, providing rewards and motivation, allocating sufficient resources, and exercising change management.

Monitoring and Evaluation (M&E) included six observed indicators, such as developing performance indicators, involving stakeholders in M&E processes, conducting periodic evaluations, providing feedback, regularly collecting performance reports, and adopting corrective actions. The constructs of perceived *e*fficiency (EFFI**)** and *e*ffectiveness (EFFE) were operationalized through five observed indicators each. Efficiency was assessed through timely implementation of strategies, optimal resource utilization, cost-effectiveness, process coordination, and minimization of operational waste. Effectiveness was measured by goal achievement, improvement of institutional performance, quality of outcomes, stakeholder satisfaction, and institutional competitiveness. This operationalization ensured that latent constructs were quantitatively measurable while reflecting practical institutional performance.

Quantitative Data Analysis (QUAN)*:* The quantitative data analysis aims to examine the measurable aspects of strategic management practices and their impact on institutional efficiency and effectiveness. Data collected through structured survey instruments involve latent constructs that cannot be directly observed. These latent constructs are operationalized through observed indicators. As a result, descriptive statistics, including frequency distributions, percentage, means, and standard deviations, were first computed to summarize observed variables, highlighting a foundational understanding and general trends and variations of the data patterns in strategic management practices across institutions ensure that observed indicators consistently and accurately reflect their respective latent constructs. The study also adopted different inferential statistical methods such as Structural equation model, Correlation analysis, Multivariate multiple regression and Factor analysis. Structural equation model was computed using SPSS AMOS version 23, while Correlation analysis, Multivariate multiple regression and Factor analysis were computed SPSS version 27.

In this study, Structural Equation Modeling (SEM) was employed to assess both the measurement and structural models. The measurement model was initially evaluated through Confirmatory Factor Analysis (CFA) to verify whether the observed indicators adequately represented their respective latent constructs. Reliability was examined using Cronbach's alpha and Composite Reliability (CR), while construct validity was assessed through factor loadings, Average Variance Extracted (AVE), and tests of convergent and discriminant validity to ensure the consistency and adequacy of the measurement scales.

Subsequently, the structural model was evaluated to examine the hypothesized relationships among the latent constructs. This involved the assessment of standardized path coefficients (β), significance levels (p-values), t-values (critical ratios), coefficients of determination (R^2), and hypothesis testing to determine the magnitude, direction, and statistical significance of the proposed relationships. Finally, a path diagram was developed to visually depict both the measurement and structural models, illustrating the relationships between latent constructs and their observed indicators as well as the hypothesized causal paths among the constructs.

Correlation analysis was conducted to examine the strength and direction of relationships between variables, providing preliminary insights into potential associations and guiding further analysis. Also factor Analysis including *KMO* (determine sample adequacy); *Scree-plot* (determine how many CSFs retain); *Total variance* (determine eigenvalue& factor loadings and *Component matrix*(to show component extracted) is used to identify key success factors influencing strategy implementations and underlying dimensions of strategic management practices (e.g., Top management commitment and dynamic leadership, training and career development, resource allocation, and team work.).

Qualitative Analysis (QUAL)*:* Following the quantitative analysis, the qualitative data analysis is designed to contextualize and explain quantitative results, particularly unexpected patterns or nuances in efficiency and effectiveness outcomes. Semi-structured interviews focus group discussions and document analysis serve as primary sources, allowing participants to reflect on organizational practices, challenges, and perceptions that underpin the observed quantitative trends. Analytical techniques include *Thematic Analysis* (Coding and categorizing qualitative data to identify themes that correspond to quantitative latent variables, such as strategic fit implementation, monitoring effectiveness, and resource utilization practices); *Content Analysis* (Used for documents and institutional reports to trace how observed indicators manifest in organizational processes, linking them back to latent constructs measured quantitatively), and *Pattern Matching and Explanation Building* (This approach integrates qualitative findings with prior quantitative results to construct explanatory models. Qualitative data analysis added depth, context, and practical understanding to the statistical findings, ensuring that quantitative patterns were interpreted within the realities of institutional practice. This approach ensured that

quantitative findings were enriched by real-world insights, producing a holistic understanding of strategic management practices.

Integration of QUAN and QUAL: Integration occurred at the meta-inference level, synthesizing quantitative descriptive (frequency, percentage, mean and SD) and inferential statistics (EFA, CFA, SEM, MMR, factor analysis, correlation analysis) results with qualitative thematic findings to provide a comprehensive understanding of strategic management practices. Quantitative analysis results established the scope, strength, and direction of relationships among latent constructs, while qualitative insights explained the underlying processes and contextual factors affecting efficiency and effectiveness.

Integration was reflected through a cohesive narrative in which descriptive and inferential data (factor loadings, SEM paths, & correlation analysis), and qualitative themes were interpreted together. This allowed latent construct scores and observed indicator trends to be explained meaningfully in light of participants' experiences with thematic insights, providing a coherent, multidimensional understanding of strategic management practices in higher education.

Statistical Power and Non-Response Bias Analysis: To ensure the adequacy of the sample size for Structural Equation Modeling (SEM), statistical power considerations were taken into account. SEM studies generally require large sample sizes to detect significant relationships among latent variables and minimize Type II error. Scholars recommend that SEM analysis should employ a minimum sample ranging from 200 respondents or at least 10 respondents per estimated parameter to achieve sufficient statistical power (Hair et al., 2022; Kline, 2023). Since the present study utilized a sample size exceeding the recommended threshold, the sample was considered adequate to detect meaningful relationships among the study variables and support reliable SEM estimation.

In addition, non-response bias analysis was conducted to assess whether respondents and non-respondents differed systematically. Following the recommendation of Armstrong and Overton (1977), early and late respondents were compared on selected demographic variables and key constructs using independent sample tests. The analysis revealed no statistically significant

differences between the two groups ($p > 0.05$), indicating that non-response bias was not a serious concern and that the findings reasonably represented the target population.

3.10.2 Data Presentation

Data were presented using a triangular, complementary approach to maximize clarity and interpretability and methodological rigor. Three types of data presentation and analyses were used. The first type (category) of data presentation was simply summarizing and describing the existing status of variables to be manipulated. This comprises presentation and analysis of the response rate and demographic information of research participants. This section was accomplished by applying descriptive statistics such as frequency distribution and percentage quantitatively. The second type (category) of the presentation of quantitative data which was envisioned to examine the current status of practices associated to strategic management practices as well as summarizes the influence of the overall practices. This Quantitative data were summarized numerically in tables through descriptive statistics(frequency distribution, percentage, aggregate mean scores of the answers, and standard deviation) and inferential statistics, SEM (measurement and structural model) factor analysis, and correlation coefficients, providing precise evidence of latent constructs and their observed indicators. This data analyses deals with identifying underlying relationships among the variables through the structural equation model and factor analysis, aiming at examining the relationship between the practices of the SM practices and the factors/variables at the eight universities. The SEM examines the significant relationship between the level of practice of strategic management practices and efficiency and effectiveness. The factor analysis identifies to uncover key success characteristics that influence strategy implementation as recommended by Shrestha, (2021). Accordingly, this section specified the extent to which the institutions were implementing strategic management elements and implementing strategic activities in a unified way. Graphical presentations, including tables, figures and SEM path diagrams were employed to visualize distributions, illustrated trends and structural relationships, making complex multivariate findings accessible. The third type (category) of data presentation is qualitative data which were presented narratively, with thematic insights directly linked to quantitative findings and supported by participant quotations. Illustrative quotations from participants enriched the narrative, highlighting practical explanations for observed patterns in efficiency and effectiveness. This

integrated presentation allowed to interpret numeric, structural evidence, trends, and contextual explanations simultaneously, providing a comprehensive, multidimensional, and methodologically rigorous understanding of efficiency and effectiveness of strategic management practices in higher education. Finally, different policy documents were reviewed.

3.11. Triangulation

Mixed approaches entail the application of triangulation. In this study, methodological and data source triangulation were used across the various sample methodologies. Data triangulation was used to extract findings from several sources using various tools. With the idea that triangulation improves data validation by cross-verifying from more than two sources, resulting in a more complete picture of a study problem. Methodological triangulation was also utilized under the assumption that it allows for the analysis of a single problem using both quantitative and qualitative data, as well as numerous approaches. This technique not only increases the credibility of the study findings, but it provides for a more encompassing knowledge of the subject at hand by merging multiple opinions and methodologies, improving the overall analysis and supporting stronger conclusions (Teddlie & Tashakkori, 2009).

3.12. Operationalization of Variables and Measurement

This study conceptualizes strategic management (SM) practices as a multidimensional construct comprising four interrelated dimensions: Environmental Scanning (ES), Strategy Formulation (SF), Strategy Implementation (SI), and Monitoring & Evaluation (M&E). These dimensions are widely recognized in the strategic management literature as the core phases of the strategic management cycle (Wheelen & Hunger, 2018; Bryson, 2018). In this study, these dimensions constitute the independent variables, while organizational efficiency and organizational effectiveness are treated as the dependent variables. The operationalization of variables is guided by established theoretical frameworks and adapted to the context of higher education institutions (HEIs).

Environmental Scanning (ES) is operationalized as the extent to which universities systematically collect, analyze, and utilize information from both internal and external environments to support strategic decision-making. According to Wheelen and Hunger (2018), environmental scanning enables organizations to identify opportunities and threats in the external

environment and strengths and weaknesses internally. Measurement items therefore focus on SWOT analysis, PESTEL analysis, competitive advantages, student needs assessment, stakeholder assessment, and national educational trends. Effective environmental scanning is expected to enhance efficiency by reducing uncertainty and preventing wasteful allocation of resources, and to improve effectiveness by ensuring that strategic choices are aligned with environmental realities (Bryson, 2018).

Strategy Formulation (SF) is operationalized as the process through which HEIs translate environmental information into clear strategic directions, objectives, and action plans. Bryson (2018) emphasizes that strategy formulation involves clarifying mission and vision, setting priorities, and developing strategies to achieve desired futures. Accordingly, indicators include clarity of institutional mission and vision, setting strategic goals, developing alternative strategies, selecting the best strategies, formulation of measurable strategic objectives, alignment between goals and available resources, and prioritization of tasks (Lu, 2023). Sound strategy formulation is expected to contribute to efficiency by directing resources toward high-priority areas and to effectiveness by enhancing coherence between institutional goals and operational activities (Wheelen & Hunger, 2018).

Strategy Implementation (SI) is operationalized as the extent to which formulated strategies are translated into action through leadership, organizational structures, communication, and operational processes. Wheelen and Hunger (2018) describe implementation as the stage where strategies are put into practice through programs, budgets, and procedures. Measurement items therefore capture delegation, institutional restructuring, adequacy of resources, policy development for implementation, and change management practices. Effective implementation is expected to improve efficiency by streamlining operations and minimizing duplication of effort, and to enhance effectiveness by ensuring that strategic intentions are realized in concrete organizational outcomes (Bryson, 2018). As explained above Strategy Implementation (SI) is treated as a core component of strategic management practices rather than a moderator. This approach allows for a direct assessment of its contribution to organizational efficiency and effectiveness, ensuring that the analysis captures how SI actions translate strategic plans into tangible outcomes

Monitoring & Evaluation (M&E) is operationalized as the systematic assessment of performance against strategic objectives and the use of performance information for learning and improvement. Kaplan and Norton's (1996, 2001) Balanced Scorecard framework emphasizes the importance of linking performance measurement systems to strategy and using feedback to guide corrective action. Accordingly, indicators include the presence of key performance indicators, regular reporting and performance reviews, stakeholder participation in evaluation, and use of evaluation results for decision-making. Effective M&E is expected to enhance efficiency by identifying inefficiencies and guiding resource reallocation, and to strengthen effectiveness by ensuring continuous alignment between activities and strategic goals.

Organizational Efficiency is operationalized as the degree to which HEIs utilize financial, human, and physical resources in an economical and productive manner to generate outputs, reflecting the traditional management view of efficiency as "doing things right" (Wheelen & Hunger, 2018). Indicators include cost control, optimal use of staff time, effective utilization of facilities, and reduction of operational waste.

Organizational Effectiveness is operationalized as the extent to which HEIs achieve their intended strategic objectives and produce desired outcomes, including improved quality of teaching and learning, enhanced research performance, and increased stakeholder satisfaction. Effectiveness reflects the extent to which institutions are "doing the right things" in pursuit of their mission (Bryson, 2018; Kaplan & Norton, 2001).

Strategy Implementation (SI) as a Mediating Variable

In the conceptual framework of this study, Strategy Implementation (SI) was positioned as a mediating variable linking strategic management practices with organizational efficiency and effectiveness. The mediating role of SI is theoretically grounded in the view that strategic plans and environmental assessments influence organizational outcomes primarily through effective implementation processes. In this regard, strategy implementation serves as the operational mechanism through which strategic intentions are translated into institutional performance outcomes.

Operationally, SI was measured as a latent reflective construct using multi-item Likert-scale indicators capturing key implementation dimensions, including communication of strategy, alignment of institutional structures, employee involvement, and execution of strategic activities, coordination mechanisms, and implementation monitoring. The construct was validated through factor analysis using acceptable factor loadings and reliability coefficients. Although SI was conceptually treated as a mediating variable, empirical analysis also examined it as a core strategic management dimension alongside Environmental Scanning (ES), Strategy Formulation (SF), and Monitoring and Evaluation (M&E). This analytical refinement was made to ensure consistency between the conceptual model and the observed institutional practices within Ethiopian comprehensive universities. Consequently, SI was interpreted both as an implementation mechanism and as a direct strategic management practice influencing organizational efficiency and effectiveness.

Top Management Commitment (TMC) and Resources as Moderating Variables

Top Management Commitment (TMC) and Resources were conceptually positioned as moderating variables in the study framework. Their moderating role is based on the assumption that leadership commitment and resource availability influence the strength and effectiveness of strategic management practices and their impact on organizational outcomes. Institutions characterized by strong leadership support and adequate resources are expected to implement strategies more effectively and achieve better efficiency and effectiveness outcomes.

Operationally, TMC was measured as a latent reflective construct using Likert-scale items assessing leadership involvement in strategy formulation, communication of strategic priorities, support for implementation, monitoring and evaluation participation, facilitation of innovation, and commitment to organizational change. Similarly, Resources were measured using indicators related to financial adequacy, human resource capacity, technological infrastructure, and logistical support for strategic management activities. Both constructs were validated through factor analysis and reliability assessment procedures. During empirical analysis, however, TMC and Resources were primarily examined as Critical Success Factors (CSFs) or enabling organizational conditions influencing strategic management effectiveness rather than through formal interaction-effect modeling typically associated with moderation analysis. Their influence

was assessed using descriptive statistics, factor scores, and multivariate analysis procedures. This analytical refinement was undertaken to align the operational model with empirical realities and to ensure methodological consistency while retaining the theoretical relevance of moderating conditions within the conceptual framework.

3.13. Ethical Consideration

Ethical principles were carefully observed throughout this study in line with established research standards (Akerfeldt & Bolstrup, 2021; Ederio et al., 2021). The researcher maintained professional integrity and ensured respect for all participants by adhering to ethical guidelines appropriate to the research context and procedures.

Prior to data collection, official permission was obtained through the Department of Educational Planning and Management, which facilitated formal approval from the Ministry of Education and the selected comprehensive universities. This ensured that the study was conducted on a legitimate and authorized basis. Participation in the study was entirely voluntary. Informed consent was obtained from all respondents before data collection, and participants were clearly informed about the purpose of the study. They were assured that their responses would be used solely for academic purposes, that their identities would remain confidential, and that they had the right to withdraw from the study at any stage without any consequences. To protect confidentiality and anonymity, no personal identifiers were collected, and pseudonyms were used in reporting qualitative data such as interviews and focus group discussions. These measures also helped create a comfortable environment, enabling participants to express their views freely. The researcher also considered the institutional and social context of universities, ensuring that data collection procedures respected organizational norms and values. In addition, efforts were made to minimize response bias. Assurances of anonymity and confidentiality were emphasized to reduce social desirability bias and evaluation apprehension, thereby encouraging honest and unbiased responses.

Researcher Positionality and Reflexivity: The researcher previously held a senior leadership role within the Ministry of Education, which could introduce potential bias in framing and interpreting the findings. To mitigate this, the study employed standardized data collection instruments and drew on multiple data sources, including managers and staff. Furthermore,

rigorous analytical techniques, such as factor analysis and SEM/PLS modeling, were applied to ensure objectivity. The analysis was grounded in empirical data rather than personal experience, and conscious efforts were made to maintain analytical neutrality throughout the research process. While the researcher's prior experience provided valuable contextual understanding, it did not influence the interpretation of results.

Table 3.4.Integrated Summary of Research Design and Methodology

Basic questions	Type of data		Sources of data		Data analysis techniques	Integration((QUAN ↔ QUAL)
	QUAN Strands	QUAL Strands	QUAN Strands	QUAL Strands		
RQ1: *In what ways do comprehensive universities conduct Environmental Scanning, and how does ES influence Strategy formulation?*	Numeric survey questionnaires (Likert scale)	Interviews, FGDs, policy documents& strategic plans	Department heads, directors, academic & Supportive staff; MoE senior experts	TOP and middle leaders, planning heads; student's union representatives strategic documents	QUAN=Descriptive statistics • Reliability & CFA • SEM (ES → SF) • Model fit indices QUAL= Thematic analysis	**Merging:** Joint display comparing statistical ES influence with narrative evidence of how scanning informs decisions. **Meta-inference:** Explains *why* & *how* ES affects SF in institutional contexts.
RQ2: How *are strategies formulated and how do formulation practices shape implementation effectiveness?*	Numeric survey questionnaires (Likert scale)	Interviews, FGDs, policy documents& strategic plans, policy guidelines	Department heads, directors, academic & Supportive staff, MoE senior experts	TOP and middle leaders, planning heads; student's union representatives strategic documents	QUAN= Descriptive statistics • CFA • SEM (SF → SI) • Model fit indices, correlation QUAL= Thematic coding,	**Merging:** Compare SEM results with governance structures & participatory processes. **Meta-inference:** Clarifies how leadership roles strengthen or weaken implementation outcomes
RQ3 :*To what extent are SM practices implemented efficiently and effectively, and what factors influence success?*	Numeric survey questionnaires (Likert scale)	Interviews, policy documents& strategic plans, policy guidelines	Department heads, directors, academic and Supportive staff, MoE senior experts	TOP and middle leaders, planning heads; strategic documents	QUAN= Descriptive statistics MMR, • CFA • SEM SI → EFFI; → EFFE),• R^2, effect size QUAL=Thematic coding	**Merging:** Integrate statistical strength of relationships with contextual explanations **Meta-inference:** Identifies structural & contextual drivers of EFFI & EFFE.
RQ4 :*How are SM practices monitored and evaluated, and how does M&E influence organizational performance?*	Numeric survey questionnaires (Likert scale)	Interviews, FGDs, policy documents& strategic plans, policy guidelines	Department heads, directors, academic and Supportive staff, MoE senior experts	TOP and middle leaders, planning heads; strategic documents	QUAN=Descriptive statistics • CFA • SEM QUAL= Thematic coding	**Merging:** Joint display aligning SEM paths with M&E outlines & institutional constraints. **Meta-inference:** Explains how M&E systems translate into performance

CHAPTER FOUR

4. Results and Discussions

Introduction

This preliminary paragraph discusses three parts. The first section presents an overview of the characteristics of the respondents. It presents the information and demographic evidences of the participants in detail. The second part provides a detailed outline of how the data was presented and interpreted. The third subsection deals with discussions of study results.

4.1. Characteristics of the Respondents

The characteristics of the participants' responses are examined in this subsection. Top management (vice presidents), middle management (college deans), line managers (directors and department heads), and staff members (both academic and administrative) made up the study's participants. Based on management viewpoints, the four participant groups in this study were split into two groups: managers/leaders and employees/staff. Representatives of the student councils at the target universities were also included in order to learn about their opinions, perspectives, and points of view regarding strategic management techniques.

568 (94.7%) of the 600 questionnaires that were distributed to academic and administrative staff members at the sampled universities were filled out and returned. Additionally, 176 (84.6%) of the 208 managers/leaders (including directors and department heads) who received the questionnaires filled it out and sent it back. Of the 808 questionnaires distributed to two groups, 744 (92.1%) were returned in total, and the responses were utilized in the data analysis process.

In survey research benchmarks, response rates of 50–69% are typically considered good and likely sufficient for analysis, while rates of 70% or higher are generally considered excellent (Mugenda & Mugenda, 2003). The 92.1% response rate in this study therefore exceeds established quality benchmarks and is legitimate for analysis.

To accomplish the study's objective, the complete set of data was gathered through focus groups, interviews, open-ended and closed-ended questionnaires, and document analysis as the inquiry tool. The head of the development planning and budgeting unit, as well as upper and middle management were interviewed in order to gather information. Additionally, representatives from the student council participated in a focus group discussion. The quantitative data was presented and analyzed using IBM SPSS AMOS statistical software. To

improve the quality of the data gathered, the degree to which the elements were used was assessed using a five-point Likert scale. The demographic characteristics and SM practices (environmental scanning and strategy formulation, implementation, monitoring, and evaluation) of Ethiopian comprehensive universities were evaluated using descriptive statistics like percentage, mean, and standard deviation as well as structural education model, and factor analysis.

Similarly, Akmaliah (2009) perspective served as a reference for the data analysis in this study. The benchmark mean was set at 0-1.5, which can be as strongly disagree; 1.51 to 2.50, which can be as disagree; 2.51 to 3.50, which can be as neutral; 3.51 to 4.50, which can be as agree; and a mean above 4.51, which can be as strongly agree; that is, factors with mean values greater than 3.51 are deemed acceptable, and vice versa, while a standard deviation less than one is regarded as normally distributed. In order to triangulate and/or support/corroborate the findings of the quantitative data, the qualitative data analysis in the form of texts and quotes was undertaken after the quantitative data analysis. The ultimate result was the overall converged findings, which are shown in the next subsection.

4.2. Demographic Evidence of the Participants

The provision of precise information on the participant's characteristics enables readers and researchers to establish to whom research results apply, as well as make comparisons across repetitions of studies. It also gives evidence required for research syntheses and data analysis (Carol, 2011). Therefore, the researcher's initial task was to gather comprehensive information from eight universities in Ethiopia, namely Wachemo, Werabie, Selale, Odabultum, Madawolabu, Metu, Gambella, and Bule Hora universities. The information sought pertained to top, middle, and line managers; academic and supportive staff; and participants' gender, experience at the current university, total work experience, position within the university, current qualifications, academic rank, field of study, and specific training received in strategic management practices. The study envisioned to examine the adequacy and suitability of the respondents' responses to inquiries about the effectiveness and efficiency of strategic management practices. The following sub section of the study emphasizes on the demographic data of the respondents.

Table 4.1 Demographic Information of Respondents of the Study

Description	Description	No.	(%)	Remarks
Sex	Male	526	70.7	
	Female	218	29.3	
	Total	744	100%	
Experience in current university (in years)	<5	342	46	
	6-10	260	34.9	
	11-15	99	13.3	
	16-20	34	4.6	
	> 25	9	1.2	
	Total	744	100%	
Total work experience (in years)	11-15	561	75.4	All senior Participants were involved
	16-20	98	13.2	
	21-25	56	7.50	
	>25	29	3.9	
	Total	744	100%	
Position in the University	Department heads	96	12.9	
	Line manager	80	10.8	
	Academic staff	408	54.8	
	Support staff	160	21.5	
	Total	744	100%	
Current qualifications	MA/MSc	673	90.5	MA/MSC & above
	PhD	71	9.5	
	Total	744	100%	
Academic rank (for only academic staff)	Lecturer	298	73.03	
	Ass.Prof.	104	25.5	
	Associate Prof.	6	1.47	
	Total	408	100%	
Field of study	Engineering & technology	21	2.83	
	Medicine & health sciences	19	2.6	
	Education & behavioral studies	96	12.9	
	Natural & comp. sciences	143	19.2	
	Social and humanities	194	26.07	
	Business & Economic	244	32.8	
	Agriculture	27	3.6	
	Total	744	100%	
Any special training	Yes	147	19.8	
	No	597	80.2	
	Total	744	100%	

Source: Field Survey Data (2024/25)

Figure 4.1 shows the gender distribution of key informants at target comprehensive universities in Ethiopia, with 526 Males and 218 Females. This means that the target comprehensive universities in Ethiopia, and particularly the responders, are dominated by men. Moreover, Table 4.1 also shows the participants' work experience in the current university. As such, 362 (48.7%) of those polled have less than five years, 267 (35.9%) have 6- 10 years of experience, while 108(14.5%) have 11 to 15 years. Also, the study examined the total work experience of the key informants. Based on the analysis, 127 (17.1%) of those polled have <5 years of total work experience, 388(52.1%) have 6-10 years total experience while 229 (30.8%) have 11-15 years. This illustrates that employees in the comprehensive universities in Ethiopia have significant work experience at the organization and can deliver tangible evidence about it. This experience positions them well to contribute valuable insights and improvements within their institutions. Their extensive backgrounds suggest a deep understanding of the challenges and opportunities in the higher education sector in Ethiopia.

The study attempted to assess the position of the key informant to identify whether the participants are capable of delivering tangible evidence on the issue under study. Based on the premises stated above, 96 (12.9%) of respondents were department heads, 80 (10.8%) of them were line managers, 408 (54.8%) were academic staff, and the remaining 160 (21.5%) were senior experts. Similarly, 8 top management, 32 college deans, and 8 development planning and resource mobilization unit heads were involved through interviews in the study. Also, 24 student council representatives participated in the focus group discussion. This illustrates that the key informants who involved in the study were skillful professionals who could easily understand and react effectively to the questionnaire and had tangible evidence about the strategic management practices in their respective universities. According to the Table 4.1, the majority of respondents, 673 (90.5%), had a master's degree, and 71 (9.5%) of participants had a PhD degree. This means that 744 (100%) of the respondents had a master's and PhD degree, demonstrating that the majority of the target comprehensive university staff are skilled professionals who can easily understand and react effectively to the questionnaire.

Moreover, an assessment was conducted to have a clear understanding of the academic ranks of the key informants. As a result, the majority, or 298 (73.03%), of the academic staff who involved in the study respondents were lecturers; 104 (25.5%) had an assistant professor rank, while the rest, 6 (1.47%), had an associate professor rank, which demonstrates that the participants who were involved in the study had additional knowledge, skills, and experience about the strategic management practices in their target universities. The most study field of

the respondents, according to the pie chart, was business & economics, with 244 (32.8%). The second most prevalent study field of the respondents was social sciences and humanities, with 194 (26.07%); 170 (22.9%) came in third position in the natural and computational sciences study field. Participants with 96 (12.9%) are from the education and behavioral studies field, while the remaining 67 (9.03%) are from the engineering and technology study field. Lastly, an effort was made to ascertain whether the respondents had any particular training on strategic management techniques at the universities they were targeting. The purpose of this investigation of the respondents' training is to evaluate their degree of readiness and proficiency for the study of strategic management techniques. Knowing their background in this field can help put the study's findings in a meaningful context. According to the key informants' comments, 597 (80.2%) of the participants say they have no specific training in the subject of strategic management, whereas 147 (19.8%) of the respondents have received training in this area. This indicates that most of the respondents lack specialized training in strategic management, which has an impact on how the plans are implemented in their target universities. Training can boost employee confidence and have a good effect on an individual's overall performance and success, which helps the success of the organization, according to Balwant et al. (2022). Investing in training not only helps employees develop their skills but also shows how valuable they are.

Table 4.2 Demographic information of interviewee & focus group discussion participant

No	Institutions	Interviewee Participants												FGD		
		Top managers			Middle managers			Planning heads			MoE					
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	Wachemo	1	-	1	4	-	4	1	-	1	-	-	-	3	-	3
2	Werabie	1	-	1	4	-	4	1	-	1	-	-	-	2	1	3
3	Selale	1	-	1	4	-	4	1	-	1	-	-	-	2	1	3
4	Oda Bultum	1	-	1	3	1	4	1	-	1	-	-	-	3	-	3
5	Madda Walabu	1	-	1	4	-	4	-	1	1	-	-	-	2	1	3
6	Metu	1	-	1	4	-	4	1	-	1	-	-	-	2	1	3
7	Gambella	1	-	1	3	1	4	1	-	1	-	-	-	3	-	3
8	Bule hora	-	1	1	4	-	4	1	-	1	-	-	-	2	1	3
9	MoE	-	-	-	-			-			3	-	3	-	-	-
10	Sub Total	7	1	8	30	2	32	7	1	8	3	-	3	19	5	24
11	**Grand Total**	**75**														

As can be seen from Table 4.1 the data illustrate significant trends in user engagement over the past year. The findings suggest a notable increase in interaction rates, particularly during peak hours, highlighting the importance of targeted marketing strategies. A total of 75 respondents participated in the interview and FGDs in the study. Out of this, 8 key informants are top managers, 32 are middle managers (College deans), 8 of them are development planning and budgeting unit heads, 3 of them are from the Ministry of Education, and the rest 24 are student council representatives who are involved in focus group discussions. This diverse group of participants provides a broad perspective on the topic, ensuring that various viewpoints are considered. Their roles span different levels of management and stakeholder involvement, which enriches the findings of the study. In terms of gender, out of the total participants who were involved in interviews and focus group discussions, 66 participants are male and 9 are female.

4.3. Data Presentation, analysis and Discussion

The presentation, analysis, and discussion of data in this study follow a theme-based integrated approach organized around four major strategic management dimensions: Environmental Scanning, Strategy Formulation, Strategy Implementation, and Monitoring and Evaluation. Within each thematic area, findings are systematically presented using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistical analyses, including correlation analysis, multivariate multiple regression, factor analysis, and Structural Equation Modeling (SEM). Quantitative findings are followed by qualitative evidence and corresponding discussions to provide integrated interpretation and meaningful understanding of the results.

The qualitative phase was specifically employed to explain and elaborate quantitative findings that required further clarification, particularly areas identified as moderate, weak, or inconsistent in the survey results. Accordingly, interview discussions focused on exploring underlying reasons, contextual factors, and institutional experiences related to those findings.

The study therefore employed an integrated results-and-discussion approach for both quantitative and qualitative data. However, due to methodological and analytical differences, descriptive statistics, SEM analysis, qualitative findings, and the integration of quantitative and qualitative results were presented in separate sections to enhance analytical clarity, coherence, and comprehensive interpretation. This structure provides a contextually grounded

and methodologically rigorous understanding of how the strategic management dimensions operate and interact within the institutional setting.

4.4. Theme 1: Environmental Scanning

4.4.1 Descriptive Analysis of Environmental Scanning Dimensions

To establish a foundational understanding of how comprehensive universities in Ethiopia engage in environmental scanning, descriptive statistics were computed for the observed dimensions of the construct. Accordingly, two categories of participants managers/leaders and employees/staff members were asked to share their experiences and perspectives regarding the extent to which their respective universities undertake environmental scanning processes prior to the formulation of institutional strategies.

Quantitative Findings The quantitative analysis includes frequency, percentage, means), standard deviations, and structural model equation (SEM), offering insight into areas of relative strength and weakness across institutions. These findings provide the quantitative baseline that informs subsequent structural model analyses and serves as a reference point for integrating qualitative evidence. Table 4.3 summarizes the descriptive statistics for each dimension of environmental scanning.

Table 4.3 an aggregate responses on the Practice of Environmental scanning

Code	To what extent do the following dimensions were used for environmental scanning at your university?	**Respondents rating/agreement**															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
ES1	Conducting SWOT Analysis	176	3.88	1.02	3.35	7.3	17.7	41.6	30.1	568	4.04	.992	2.65	6.3	16.4	39.7	35
ES2	Conducting PETSEL analysis	176	2.28	1.03	1.5	66.5	19.4	7.3	5.3	568	2.25	1	17.2	48.2	11.5	13.4	9.8
ES3	Assessing competitive advantage	176	2.18	0.99	32.4	44.9	8.3	7.45	7	568	2.27	0.97	19.9	47.9	12.4	15.1	4.8
ES4	Identifying students' needs assessment	176	2.35	0.95	29.7	49.8	8.15	8.8	3.55	568	2.2	0.87	23.5	56.4	13.9	3.95	2.3
ES5	Conducting stakeholders analysis	176	2.13	0.82	18.4	59.1	16.1	4.6	1.9	568	2.09	0.84	19.7	58.6	14.8	4.6	2.3
ES6	Assessment of national educational trends	176	3.61	0.98	4.3	5.7	22.4	39.8	27.8	568	3.73	0.96	2.7	4.6	12.6	39.3	40.8
	Average		2.74		14.9	43.0	14.9	18.3	12.6		2.76		13.9	40.6	13.8	19.3	15.8

Likert Scale: 1= strongly disagree; 2= Disagree; 3= Moderate; 4= Agree' 5= strongly agree

Source: Field Survey Data (2024/25).

To explore the practice of environmental scanning, this study endeavored to recognize the general techniques of environmental scanning at eight public comprehensive universities. To identify the prevailing method, key participants were requested to show the major approaches/ themes of environmental scanning. The extent of application of each of the six items was then assessed using subscale questions produced under each technique.

SWOT Analysis: Table 4.3 indicates that SWOT analysis is generally integrated into environmental scanning practices in Ethiopian comprehensive universities before the formulation of vision and mission statements, although its level of application varies across institutions. Only a small proportion of respondents reported non-adoption, while the majority confirmed its use, with 41.55% of managers and 39.65% of employees agreeing, and 30.1% and 35% respectively strongly agreeing that SWOT analysis is practiced. The aggregate mean ($\mu = 3.960$) and standard deviation (SD = 1.020) show an overall positive perception with moderate variation among universities.

The finding suggests that universities recognize SWOT analysis as an important strategic management tool for assessing internal and external environments; however, its implementation is not yet fully systematic or continuously embedded in institutional decision-making. This implies that SWOT analysis is often conducted as a procedural planning requirement rather than as an ongoing strategic learning mechanism.

The result supports earlier strategic management literature which views SWOT analysis as a widely used environmental scanning tool for aligning organizational capacities with external conditions. Porter emphasizes the importance of assessing internal and external factors in strategy formulation, while Mintzberg argues that strategic tools are more effective when used as continuous learning and adaptive decision-making mechanisms rather than static planning exercises. Similarly, recent studies conceptualize SWOT analysis as a foundational but often static strategic tool. Phiri et al. (2024) argue that SWOT is more effective when applied dynamically, while Jain (2025) notes that modern SWOT practices increasingly rely on real-time and data-driven environmental analysis. Therefore, the findings imply that Ethiopian comprehensive universities need to strengthen the continuous and evidence-based application of SWOT analysis to enhance strategic responsiveness and institutional effectiveness.

PESTEL Analysis: Table 4.3 indicates that PESTEL analysis is weakly integrated into environmental scanning practices in Ethiopian comprehensive universities prior to vision and mission formulation. A large proportion of respondents, particularly 66.5% of managers and 48.2% of employees, disagreed that PESTEL analysis is systematically applied, while only a small percentage confirmed its use. The aggregate mean ($\mu = 2.265$) and standard deviation (SD = 1.032) indicate low institutional adoption with moderate variation across universities. Overall, the finding suggests that macro-environmental scanning is not adequately institutionalized within strategic management practices.

This finding implies limited strategic sensitivity to external political, economic, social, technological, environmental, and legal factors, indicating that strategy formulation in universities remains largely internally oriented. The result supports the argument that effective strategic management requires continuous assessment of external environmental forces to improve institutional adaptability and long-term positioning. Porter emphasizes the importance of analyzing external environmental conditions in shaping strategic direction, while Mintzberg argues that strategic planning should continuously respond to changing environmental realities rather than rely on rigid internal planning approaches.

The finding also aligns with recent literature on higher education strategic management. Woelert & Stensaker (2024) noted that universities operate within policy-driven environments where political and legal factors often dominate strategic attention. However, the limited consideration of technological and social dimensions observed in this study suggests weaknesses in comprehensive environmental scanning. Similarly, Jain (2025) argues that PESTEL analysis is most effective when all environmental dimensions are systematically integrated, particularly within rapidly changing and digitally transforming higher education systems. Therefore, the findings imply that Ethiopian comprehensive universities need to strengthen comprehensive external environmental analysis to improve strategic responsiveness and institutional effectiveness.

Assessing Competitive Advantages: Table 4.3 shows that assessment of competitive advantage within environmental scanning in Ethiopian comprehensive universities is generally weak. A considerable proportion of respondents, particularly 32.35% of managers and 19.85% of employees/staff, strongly disagreed, while 44.9% and 47.85% respectively disagreed that competitive advantage assessments are undertaken. Only 8.3% of managers and 12.4% of employees reported moderate implementation, whereas 7.45% and 15.1%

agreed, and merely 7% and 4.8% strongly agreed. The aggregate mean (μ = 2.225) and standard deviation (SD = 0.997) confirm low institutional practice with limited variation across universities. The finding suggests that universities place limited emphasis on institutional differentiation, benchmarking, and strategic positioning, which may weaken their ability to respond effectively to increasing competition in higher education.

This finding supports strategic management literature emphasizing the importance of competitive positioning for organizational sustainability. Porter argues that organizations must continuously assess their competitive environment to achieve strategic advantage, while Mintzberg emphasizes adaptive strategic positioning in dynamic environments. Similarly, Phiri et al. (2024) note that systematic competitive analysis strengthens institutional positioning, whereas Woelert and Stensaker (2024) argue that competitive intelligence is a critical capability for maintaining relevance in evolving higher education systems.

Identifying Students' Needs: Table 4.3 indicates that identifying students' needs during environmental scanning is notably weak in Ethiopian comprehensive universities. A substantial proportion of respondents, specifically 29.7% of managers and 23.45% of employees/staff, strongly disagreed, while 49.8% and 56.4% respectively disagreed that students' needs are systematically assessed. Only 8.15% of managers and 13.9% of employees reported moderate implementation, while 8.8% and 3.95% agreed, and only 3.55% and 2.3% strongly agreed. The aggregate mean (μ = 2.275) and standard deviation (SD = 0.8285) indicate low and relatively consistent implementation across universities. Overall, nearly 80% of respondents reported weak integration of students' needs into environmental scanning, implying that institutional planning remains insufficiently demand-driven and less responsive to changing learner expectations and labor market requirements.

This finding aligns with contemporary literature emphasizing student-centered strategic management in higher education. Jain (2025) argues that universities need to align academic programs with evolving learner expectations and labor market demands. Likewise, Phiri et al. (2024) emphasize that proactive student-needs assessment improves institutional responsiveness and program relevance. Therefore, the weak integration of students' needs observed in this study indicates limitations in responsive and participatory strategic planning practices.

***Conducting Stakeholder Analysis*:** Table 4.3 further reveals that stakeholder analysis is the weakest dimension of environmental scanning practice in Ethiopian comprehensive universities. About 18.35% of managers and 19.7% of employees/staff strongly disagreed, while 59.05% and 58.6% respectively disagreed that stakeholder analysis is conducted. Only 16.1% of managers and 14.8% of employees indicated moderate implementation, whereas 4.6% agreed, and merely 1.9% of managers and 2.3% of employees strongly agreed. The aggregate mean ($\mu = 2.110$) and standard deviation (SD = 0.8285) further confirm minimal institutionalization with limited variability in responses. Overall, the finding demonstrates weak stakeholder participation in strategic decision-making and limited incorporation of external perspectives into institutional planning processes.

This finding is consistent with stakeholder theory and higher education governance literature. Woelert and Stensaker (2024) argue that universities operate within complex multi-stakeholder environments and therefore require active engagement with diverse actors to achieve strategic legitimacy and effectiveness. Similarly, Phiri et al. (2024) state that structured stakeholder engagement improves alignment between university strategies and societal as well as labor market needs. The current finding therefore reflects weaknesses in participatory governance and environmental scanning maturity.

Assessment of National Educational Trends: Table 4.3 indicates that assessment of national educational trends is comparatively well integrated into environmental scanning practices in Ethiopian comprehensive universities. A substantial proportion of respondents, specifically 27.8% of managers and 40.8% of employees/staff, strongly agreed, while 39.8% and 39.3% respectively agreed that such assessments are undertaken. In addition, 22.4% of managers and 12.6% of employees reported moderate implementation. Only a small proportion disagreed, with 5.7% of managers and 4.6% of employees disagreeing, and 4.3% and 2.7% respectively strongly disagreeing. The aggregate mean ($\mu = 3.671$) and standard deviation (SD = 0.9700) indicate comparatively stronger implementation with moderate variation across institutions. The finding suggests that universities are more responsive to national higher education policies and government priorities than to broader competitive or stakeholder-related environmental factors.

This finding reflects the strong influence of centralized higher education governance on institutional strategic management. Woelert and Stensaker (2024) note that universities operating within regulated systems often prioritize compliance with government policies and

national reform agendas. However, Jain (2025) argues that effective environmental scanning should move beyond reactive policy compliance toward proactive strategic foresight and innovation. Thus, although universities demonstrate awareness of national educational trends, the findings suggest that environmental scanning remains more policy-driven than strategically anticipatory.

Overall, the findings demonstrate that environmental scanning in comprehensive universities is present but fragmented. While tools such as SWOT, PESTEL, competitive analysis, and stakeholder assessment are used, they are not fully integrated into a continuous strategic intelligence system. Recent literature emphasizes that environmental scanning should function as a dynamic capability enabling real-time strategic adaptation (Jain, 2025; Woelert & Stensaker, 2024). The current fragmented application limits its effectiveness in supporting strategic management efficiency and effectiveness in higher education institutions.

4.4.2 Structural Equation Model Analysis for Environmental Scanning

The SEM analysis was conducted in two stages. First, Structural Equation Modeling (SEM) was employed to assess both the measurement and structural models. The measurement model was initially evaluated through Confirmatory Factor Analysis (CFA) to verify whether the observed indicators adequately represented their respective latent constructs. Reliability was examined using Cronbach's alpha and Composite Reliability (CR), while construct validity was assessed through factor loadings, Average Variance Extracted (AVE), and tests of convergent and discriminant validity to ensure the consistency and adequacy of the measurement scales. Consequently, the structural model was evaluated to examine the hypothesized relationships among the latent constructs. This involved the assessment of standardized path coefficients (β), significance levels (p-values), t-values (critical ratios), coefficients of determination (R^2), and hypothesis testing to determine the magnitude, direction, and statistical significance of the proposed relationships. Finally, a path diagram was developed to visually depict both the measurement and structural models, illustrating the relationships between latent constructs and their observed indicators as well as the hypothesized causal paths among the constructs. The result provides robust empirical evidence on the strength, direction, and significance of these relationships, thereby establishing a sound basis for theory-driven interpretation and discussion in the subsequent section.

4.4.2.1. Measurement Model Analysis for Environmental Scanning(ES)

Environmental Scanning (ES): was treated as one of the latent constructs of strategic management practices in this study. The construct was measured using multiple observed indicators(*conducting SWOT, Conducting PESTEL, assessing competitive advantages, assessing student's need analysis, stakeholders assessment, assessment of national educational trends*) designed to assess the extent to which universities systematically analyze internal and external environments to support strategic decision-making. Perceived efficiency and effectiveness were analyzed separately using different metrics because they represent distinct organizational performance dimensions. Therefore efficiency was measured metrics such as *timelines, resource utilization, cost effectiveness, process coordination, decision making speed, while* effectiveness analyzed using metrics such as *goal achievement/strategic alignment student success, institutional reputation, quality of teaching & research outputs, stakeholders satisfaction* in comprehensive universities in Ethiopia.

Table 4.4.Measurement Model Assessment for Environmental Scanning (ES)

Indicators	Average factor loadings	(α)	CR	(AVE)	Remarks
ES1-ES6	0.812	0.76	0.913	0.677	Standardized factor loadings ranges 0.765-0854

The measurement model for Environmental Scanning (ES) was assessed using Confirmatory Factor Analysis (CFA). Reliability was evaluated through Cronbach's alpha and Composite Reliability (CR). The construct achieved a cronbach alpha value of 0.76 and a CR value of 0.913, both exceeding the recommended threshold of 0.70, indicating satisfactory internal consistency reliability. Convergent validity was examined using standardized factor loadings and Average variance extracted (AVE). All factor loadings ranged from 0.765 to 0.854, with average 0.812 surpassing the recommended minimum value of 0.50. Similarly, the AVE value of 0.677 exceeded the threshold of 0.50, confirming adequate convergent validity. Therefore, the indicators consistently and adequately represented the Environmental Scanning construct.

Confirmatory factor Analysis (CFA) Model Fit

The CFA was conducted to assess the construct validity of the study variables: Environmental Scanning (ES), Efficiency (EFFI), and Effectiveness (EFFE). The

measurement model included 6 indicators for ES and 5 dependent variables each for EFF and EFE as shown below.

Table 4.5: CFA Overall Measurement Model Fit

Fit index	Overall CFA values	Recommended threshold	Interpretation
X^2/df	1.378	<2-3	Excellent fit
GFI	0.875	>0.90(acceptable>0.80)	Moderate fit: indicating that are reasonably captured.
CFI	0.962	> 0.90 → Excellent	Good incremental fit
TLI	0.965	>0.90 → Excellent	Adjusted for model complexity:
PCFI	0.867	>0.50→ Acceptable	good fit
RMSEA	0.068	<0.05(good <0.05-0.08 acceptable	acceptable fit

Where, x2/df= degrees of freedom; GFI=Goodness of fit; CFI= comparative fit; TLI= Tucker Lewis index; PLFS= parsimonious comparative fit; RMSEA= root mean square error of approximation

The CFA measurement model for Environmental Scanning (ES), Efficiency (EFF), and Effectiveness (EFE) showed acceptable to excellent fit. Specifically, the normalized chi-square (χ^2/df = 1.378) indicated excellent fit. The goodness-of-fit index (GFI = 0.875) was moderate but acceptable, reflecting that the 16 indicators reasonably captured the latent constructs. Incremental fit indices, CFI = 0.962 and TLI = 0.965, suggested excellent improvement over a null model, demonstrating strong construct validity for ES, EFF, and EFE. The parsimonious fit index (PCFI = 0.867) confirmed the model is appropriately parsimonious, while RMSEA = 0.068 indicated acceptable approximation error. Overall, the CFA confirms that the measurement of ES, EFF, and EFE is reliable and valid for SEM analysis. As a result, the fit indices indicate an acceptable to good model fit. Overall, hypotheses H1a and H1b are supported. These results indicate that even partially practiced, ES contributes meaningfully to organizational performance by enhancing resource utilization, process coordination, timely decision-making, goal achievement, strategic alignment, and stakeholder satisfaction.

4.4.2.2. Structural Model Results

The structural model in SEM evaluates the magnitude, direction, and statistical significance of causal relationships among latent constructs, as specified by the study hypotheses. In this study aligned with Strategic Fit Theory, structural model results measures the extent to which

alignment between strategic management practices and organizational processes enhances efficiency and effectiveness.

Table 4.6: Structural Model Results (Hypothesis Testing)

Hypothesis	Structural path	**(β)**	**R^2**	**C.R**	**p-value**	**Decision**	**Impact of performance Dimension**
H1a	ES → EFF	0.61	0.22	5.32	< 0.001	Supported	Efficiency
H1b	ES → EFE	0.65	0.18	5.45	< 0.001	Supported	Effectiveness

Note: β = *standardized regression weight; value greater than ±1.96 indicates statistical significance at p < 0.05.*

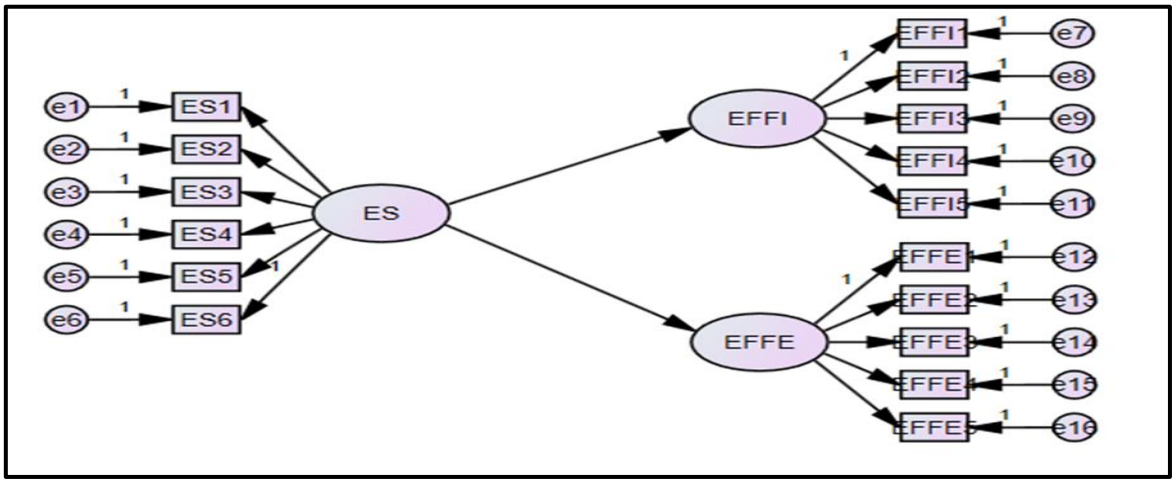
The structural model results for hypotheses testing in Table 4.6 indicate that the predictor variable has a strong, positive, and statistically significant effect on both efficiency (EFFI) and effectiveness (EFFE). Specifically, the standardized path coefficient for EFFI (β = 0.61) demonstrates a moderate-to-strong positive influence, with a high critical ratio (C.R. = 5.32) exceeding the recommended threshold, and a p-value below 0 .001 confirming robust statistical significance. Similarly, the identical estimates for EFFE (β = 0.65, C.R. = 5.45, p <0 .001) reveal that improvements in the predictor construct lead to substantial and meaningful gains in institutional effectiveness. The squared multiple correlations (R^2) reveal that 22% of the variance in EFFI and 18% in EFFE are explained by ES, highlighting the construct's substantive predictive power. Therefore, Hypothesis H1a and H1b are supported. These findings provide strong empirical support for the proposed hypotheses, indicating that the modeled relationships are consistent with the underlying theoretical framework and that the predictor contributes significantly to enhancing both efficiency and effectiveness outcomes. This supports H1 and H2, showing that ES contributes meaningfully to organizational performance in terms of efficiency and effectiveness. It enhances not only the optimal utilization of institutional resources but also the achievement of strategic objectives.

Path diagram for Environmental Scanning

The path diagram of structural equation model illustrates the critical role of Environmental Scanning (ES) **i**n enhancing both organizational efficiency (EFFI) and effectiveness (EFFE)**.** Empirical results indicate that ES exerts positive and significant effects on EFFI and EFFE, suggesting that systematic monitoring of internal and external environments enables

universities to allocate resources optimally, streamline processes, and align operations with strategic objectives. The standardized path coefficients $\beta = 0.61$, $p < 0.001$ for ES → EFFI and $\beta = 0.65$, $p < 0.001$ for ES → EFFE confirm that a one-standard-deviation increase in ES corresponds to substantial improvements in efficiency and effectiveness, while the R^2 values for EFFI and EFFE demonstrate that ES accounts for a meaningful portion of variance in institutional performance. These findings underscore ES as a strategic lever, providing both theoretical support for resource-based and strategic management perspectives and practical guidance for administrators to institutionalize proactive environmental scanning to achieve operational excellence and goal attainment.

Figure 4.1 Path diagram of a structural Model: Environmental Scanning



Source: SPSS AMOS (2026)

4.4.3 Qualitative Data Analysis of Environmental Scanning

The qualitative findings provide explanatory depth, clarifying why certain environmental scanning dimensions are strong, weak, or unevenly practiced. To further explain the quantitative findings that environmental scanning practices were only moderately implemented and insufficiently institutionalized across the sampled comprehensive universities, semi-structured interviews were conducted with university presidents, vice presidents, and directors of planning and resource mobilization.

The interviews sought to explore the organizational, leadership, institutional, and resource-related factors influencing the institutionalization of environmental scanning practices, as well as participants' perspectives on the challenges and opportunities for strengthening

evidence-based strategic planning in Ethiopian public comprehensive universities. For instance, Director of Planning and Resource Mobilization University "E" noted:

> "*Although environmental scanning is recognized as an important component of strategic management, it has not yet become an institutional culture in many universities. One major challenge is the limited commitment of university leadership to evidence-based planning. Environmental scanning is often conducted only during the preparation of a strategic plan or when requested by the Ministry of Education, rather than being practiced continuously. Furthermore, many universities lack clear institutional guidelines, standardized procedures, and dedicated structures responsible for regularly monitoring internal and external environmental changes. Resource constraints, particularly inadequate financial support, shortage of skilled planning professionals, and limited access to reliable data management systems, further weaken the institutionalization of environmental scanning. As a result, our university frequently makes strategic decisions based on assumptions instead of comprehensive environmental evidence.*

Moreover, one of College dean of university "*B*" mentioned that

> *"From my experience, the greatest obstacle is the absence of a strong strategic management culture within many universities. Environmental scanning is often viewed as the responsibility of the planning office instead of a shared institutional responsibility involving all academic and administrative units. Moreover, universities rarely allocate sufficient budgets for data collection, research, or environmental analysis. Leadership tends to focus more on immediate operational challenges than on anticipating future opportunities and threats. Weak information systems, fragmented institutional databases, and inadequate analytical capacity further limit the generation of timely strategic intelligence. Unless leadership demonstrates stronger commitment, builds institutional capacity, and invests in modern management information systems, environmental scanning will continue to be implemented only at a moderate level (26, Feb.2025/10.45).*

Moreover, interview was held for one of the academic vice dean of university "C" and also revealed that;

"The institutionalization of environmental scanning is constrained by several organizational and leadership-related factors. First, strategic planning units are often understaffed and have limited authority to coordinate university-wide environmental assessments. Second, leadership changes frequently interrupt strategic management processes, resulting in weak continuity and limited follow-up of environmental scanning activities. In addition, insufficient stakeholder participation reduces the quality of environmental information because inputs from academic staff, students, industry partners, employers, and local communities are not systematically collected. Financial limitations also prevent universities from conducting regular labor market analyses, technological assessments, benchmarking studies, and policy reviews. Consequently, environmental scanning remains an occasional planning exercise rather than a continuous management function that informs strategic decision-making (13 April/2025, 3:30am).

Overall, the interview findings corroborated the quantitative results by revealing that environmental scanning is recognized as an essential strategic management practice but remains only partially institutionalized across the selected comprehensive universities. Participants consistently identified weak leadership commitment, the absence of a strong strategic management culture, inadequate institutional policies and structures, limited financial and human resources, weak information and data management systems, insufficient stakeholder engagement, and frequent leadership turnover as the major barriers to systematic environmental scanning. Consequently, environmental scanning is often conducted as a periodic planning requirement rather than a continuous organizational process, limiting its contribution to evidence-based strategic planning and institutional decision-making.

Accordingly, semi-structured interviews were conducted with top- and middle-level managers from the selected universities to explore how internal and external environmental changes are identified and integrated into strategic planning and institutional decision-making, as well as the challenges affecting this process. In this regard, one of the middle-level managers from University "H" stated:

"Internal and external environmental changes are mainly identified through annual performance reviews, stakeholder consultations, government policy directives, and periodic SWOT analyses conducted during strategic planning. However, these activities are not carried out consistently. Limited data availability, weak information systems, and

inadequate stakeholder participation often reduce the quality and timeliness of environmental information used in institutional decision-making (4, May, 2025/11.05).

Also, interview was conducted for development plan unit heads about their environmental scanning process. For instance, the development planning head of university "G" indicated that

"Our university identifies environmental changes by monitoring national higher education policies, labor market demands, technological developments, and institutional performance reports. Nevertheless, environmental scanning is largely reactive rather than proactive. Resource limitations, insufficient analytical capacity, and weak coordination among academic and administrative units hinder the effective integration of environmental information into strategic planning and decision-making (Plan, 13 April/2025, 3:30am).

In sum, the interview findings indicate that universities identify internal and external environmental changes through annual performance reviews, stakeholder consultations, government policy directives, SWOT analyses, institutional performance reports, and monitoring of national higher education policies, labor market trends, and technological developments. However, participants consistently emphasized that these practices are implemented inconsistently and tend to be reactive rather than proactive. Limited data availability, weak information systems, inadequate stakeholder engagement, resource constraints, insufficient analytical capacity, and weak coordination among academic and administrative units were identified as the principal challenges limiting the effective integration of environmental information into strategic planning and institutional decision-making.

4.4.4 Overall Intergradation and explanatory interpretation for Analysis of Environmental Scanning Practices

The integration of the quantitative, structural equation modeling (SEM), and qualitative findings provides a comprehensive understanding of environmental scanning practices and their contribution to strategic management in Ethiopian public comprehensive universities. The quantitative findings revealed that environmental scanning is implemented at a moderate but uneven level across the sampled universities. While SWOT analysis (M = 3.960) and the assessment of national educational trends (M = 3.671) were relatively well practiced, critical dimensions such as PESTEL analysis (M = 2.265), competitive advantage assessment (M = 2.225), student needs assessment (M = 2.275), and stakeholder analysis (M = 2.110) were

implemented at low levels. These findings indicate that environmental scanning remains fragmented and largely compliance-oriented rather than functioning as a comprehensive and continuous strategic intelligence system.

The SEM results, however, demonstrated that environmental scanning is a significant predictor of institutional performance. The measurement model confirmed satisfactory reliability and validity (Cronbach's $\alpha = 0.76$, CR = 0.913, AVE = 0.677), while the structural model revealed that environmental scanning positively and significantly influences both institutional efficiency ($\beta = 0.61$, $p < .001$) and institutional effectiveness ($\beta = 0.65$, $p < .001$), explaining 22% and 18% of the variance, respectively. These findings suggest that strengthening environmental scanning would substantially improve resource utilization, strategic decision-making, organizational coordination, and the achievement of institutional goals.

The qualitative findings provide important explanations for these quantitative and SEM results. Participants consistently reported that environmental scanning has not yet become an institutionalized organizational practice. Instead, it is commonly undertaken during strategic plan preparation or in response to directives from the Ministry of Education rather than as a continuous management function. Interviewees identified weak leadership commitment, the absence of a strategic management culture, inadequate institutional policies and governance structures, insufficient financial and human resources, fragmented management information systems, weak analytical capacity, limited stakeholder engagement, and frequent leadership turnover as the principal barriers to institutionalizing environmental scanning. Participants further indicated that universities identify environmental changes primarily through annual performance reviews, government policy directives, SWOT analyses, institutional reports, and monitoring of national higher education policies; however, these processes are often reactive, inconsistent, and insufficiently integrated into institutional decision-making.

The convergence of the three strands of evidence strongly supports contemporary strategic management theory. According to David Teece (2023), organizations operating in dynamic environments achieve superior performance when environmental sensing becomes a continuous organizational capability rather than an occasional planning activity. Likewise, Phiri et al. (2024) argue that systematic environmental scanning enhances organizational adaptability, strategic responsiveness, and long-term competitiveness by enabling institutions to anticipate environmental changes before they become operational challenges. The

fragmented implementation observed in the present study therefore limits universities' ability to develop strategic agility and evidence-based decision-making.

The findings also support the observations of Woelert and Stensaker (2024), who contend that universities increasingly operate within complex policy, technological, and stakeholder environments requiring comprehensive environmental intelligence. The relatively stronger emphasis on monitoring national educational trends, compared with the weak implementation of PESTEL analysis, stakeholder analysis, and competitive intelligence, suggests that Ethiopian universities remain largely policy-driven rather than strategically proactive. Similarly, Jain (2025) argues that effective environmental scanning should integrate political, economic, social, technological, environmental, and legal analyses with stakeholder intelligence and market information to support innovation and institutional resilience. The current findings indicate that such comprehensive integration has not yet been achieved.

Furthermore, the qualitative evidence highlighting weak leadership commitment and limited strategic management culture is consistent with recent leadership research. According to Phiri et al. (2024), leadership commitment is the primary organizational mechanism through which environmental scanning becomes institutionalized and embedded within strategic decision-making processes. Without committed leadership, dedicated organizational structures, and investments in management information systems and analytical capacity, environmental scanning is likely to remain a procedural planning requirement rather than a dynamic organizational capability.

Overall, the integration of the quantitative, SEM, and qualitative findings demonstrates a clear meta-inference. Although environmental scanning is only moderately implemented across Ethiopian public comprehensive universities, it exerts a significant positive influence on institutional efficiency and effectiveness. The qualitative findings explain that this unrealized potential results primarily from organizational, leadership, institutional, and resource constraints rather than from the ineffectiveness of environmental scanning itself. Therefore, strengthening leadership commitment, institutionalizing systematic environmental scanning frameworks, investing in digital management information systems, enhancing stakeholder engagement, and building organizational analytical capacity would enable universities to transform environmental scanning from a periodic planning exercise into a continuous strategic capability that enhances institutional resilience, strategic responsiveness, and sustainable organizational performance. This interpretation is fully consistent with

Strategic Fit Theory, which argues that organizations achieve superior performance when internal capabilities are continuously aligned with changing external environmental conditions.

4.5. Theme 2: Strategy Formulation

4.5.1 Quantitative (Descriptive) Analysis of Strategy formulation Dimensions

The analysis of strategy formulation practices in Ethiopian comprehensive universities was conducted using a mixed-methods approach, integrating quantitative evidence (descriptive statistics and structural equation modeling) with qualitative insights derived from interviews with top and middle university leaders and planning experts. The purpose of this integration was to provide a comprehensive understanding of how strategy formulation is practiced and how these practices influence institutional performance outcomes. Based on the aforementioned premises, attempts were made to investigate how comprehensive universities in Ethiopia practice strategy formulation. To do this, participants were asked to provide feedback on how their various institutions practiced strategy formulation. The replies regarding how the comprehensive universities' practice strategy formulation was analyzed independently are as follows.

Table 4.7: An aggregate responses on the Practice of Strategy Formulation

Code	How does strategy formulation is practiced at your university?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
SF1	Creating a strategic mission	176	3.82	0.92	2.75	6.3	7.7	37.8	45.7	568	3.68	0.89	2.25	10.8	16.8	47	23.2
SF2	Setting strategic goals	176	2.18	0.94	10.1	52.4	14.6	9.9	1.75	568	2.17	0.94	23.3	50.3	15.4	8.4	2.75
SF3	Developing alternative strategies	176	2.07	0.89	25.	51.4	13.4	8.35	1.05	568	2.09	1.02	32.9	49.3	7.6	1.55	8.75
SF4	Selecting the best strategies(strategy choice	176	2.08	1.05	34.3	41.8	14.2	6.3	3.55	568	1.96	1.09	34.7	45.5	12.4	3.6	3.8
SF5	Setting Quantitative targets	176	3.9	0.98	4.9	5.1	24.9	61.1	9.25	568	2.63	1.16	6.85	3.3	22.8	57.3	5.9
SF6	Setting organizational realistic & Smart objectives	176	2.45	0.99	23.4	58.8	7.6	3.45	2.75	568	2.05	0.95	43.0	37.6	7.9	6.25	5.65
SF7	Prioritizing tasks	176	2.37	0.96	34.5	46.2	8.75	3.8	6.9	568	2.12	1.04	37.9	40	6.15	6.05	9.65
SF8	Allocating adequate resources	176	2.2	1.48	36.5	37.7	13.5	4.9	7.5	568	1.85	1.21	41.9	37.9	7.65	4.4	2.55
	Average		2.63		21.5	37.5	13.1	16.9	9.8		2.31		27.9	34.3	12.7	16.8	7.78

Source: Field Survey Data (2024/25).

***Creating a Strategic Mission*:** Table 4.7 shows that strategic mission formulation is generally well established in Ethiopian comprehensive universities. A substantial proportion of respondents, particularly 45.65% of managers and 23.2% of employees/staff, strongly agreed, while 37.75% and 47% respectively agreed that their universities have formulated strategic mission. Only a small proportion reported weak practice, with 7.7% of managers and 16.75% of employees indicating moderate implementation, 6.3% and 10.8% disagree, and 2.75% and 2.25% strongly disagreeing. The aggregate mean (M = 3.749, SD = 0.9101) indicates relatively strong implementation with limited variation across institutions. The finding suggests that mission formulation is widely institutionalized and serves as a guiding framework for institutional direction and identity.

This finding aligns with strategic management literature emphasizing the importance of mission statements in organizational identity and strategic coherence. David et al. (2020) argue that mission statements clarify organizational purpose, values, and stakeholders while guiding strategic decisions and long-term value creation. However, Khalifa (2022) cautions that mission statements may remain symbolic unless integrated into operational decision-making processes. Thus, although mission formulation appears strong in the current findings, its practical strategic utilization may still be limited.

Setting Strategic Goals: Table 4.7 indicates that setting appropriate strategic goals in Ethiopian comprehensive universities is generally weak. About 10.1% of managers and 23.25% of employees/staff strongly disagreed, while 52.4% and 50.3% respectively disagreed that universities develop appropriate strategic goals. Only 14.6% of managers and 15.35% of employees reported moderate implementation, whereas 9.9% and 8.4% agreed, and only 1.75% and 2.75% strongly agreed. The aggregate mean (M = 2.174, SD = 0.9378) confirms limited effectiveness in translating institutional missions into actionable goals. The finding suggests weaknesses in defining measurable and operational strategic directions.

This finding supports contemporary strategic management literature emphasizing that effective strategy formulation requires converting mission statements into measurable and time-bound goals. Romano (2015) notes that strategic goals provide direction, improve alignment, and support accountability and resource prioritization. Similarly, Kaplan and Norton (2020) argue that strategic goals must align with performance indicators to ensure implementation success. Nguyen et al. (2023) further report that higher education institutions

frequently struggle to operationalize strategies because of weak goal-setting mechanisms, which is consistent with the current finding.

Developing Alternative Strategies: Table 4.7 further shows that the development of alternative strategies for implementation is weak. A majority of respondents, including 25.95% of managers and 32.95% of employees/staff, strongly disagreed; while 51.4% and 49.25% respectively disagreed that their universities develop alternative implementation strategies. Only 13.35% of managers and 7.6% of employees reported moderate implementation, whereas 8.35% and 1.55% agreed, and merely 1.05% and 8.75% strongly agreed. The aggregate mean (M = 2.079, SD = 0.9562) indicates limited use of scenario planning, strategic flexibility, and adaptive approaches. The finding suggests rigid planning practices and limited strategic foresight within universities.

This contradicts contemporary strategic thinking, which emphasizes flexibility and adaptability in uncertain environments. Mintzberg (2009) argues that effective strategy formulation requires exploration of multiple strategic alternatives rather than dependence on a single planned approach. Likewise, Elbanna et al. (2022) emphasize that strategic agility is increasingly important in higher education institutions facing rapidly changing environmental conditions. The findings therefore suggest limited institutional adaptability and innovation in strategic planning.

Selecting the Best Strategies (Strategy Choice): Table 4.7 indicates that selecting the best strategies for implementation is also weak in Ethiopian comprehensive universities. About 34.25% of managers and 34.7% of employees/staff strongly disagreed, while 41.8% and 45.5% respectively disagreed that universities effectively select the best strategies. Only 14.15% of managers and 12.4% of employees indicated moderate implementation, whereas 6.3% and 3.6% agreed, and only 3.55% and 3.8% strongly agreed. The aggregate mean (M = 2.021, SD = 1.0741) confirms weak strategic choice practices. The finding suggests inadequate analytical capacity and limited use of evidence-based strategic evaluation mechanisms.

This finding is inconsistent with strategic management literature emphasizing rigorous strategy evaluation and selection. Porter (2008) argues that effective strategy choice requires analysis of competitive advantage, feasibility, and organizational capability alignment. Similarly, Rothaermel (2021) highlights the importance of analytical tools such as SWOT

analysis and cost-benefit analysis in evidence-based strategic decision-making. The weak practice observed therefore indicates insufficient strategic rigor and limited analytical integration in strategy formulation.

Setting Quantitative Targets: Table 4.6 shows relatively better performance in setting quantitative targets. About 61.5% of managers and 57.3% of employees/staff agreed, while 9.25% and 5.9% respectively strongly agreed that universities set quantitative targets. In addition, 24.9% of managers and 22.75% of employees reported moderate implementation. Only a small proportion disagreed, with 4.9% of managers and 6.85% of employees disagreeing, and 5.1% and 3.33% strongly disagreeing. The aggregate mean (M = 3.267, SD = 0.9426) indicates moderate implementation. The finding suggests that universities demonstrate relatively stronger practice in establishing measurable performance indicators.

This finding aligns with performance management literature emphasizing the role of quantitative targets in monitoring implementation and improving accountability. Neely (2020) argues that measurable indicators enhance organizational learning and performance tracking. However, Marr (2021) cautions that quantitative targets should be meaningfully connected to strategic priorities to avoid superficial compliance. Thus, while universities appear to establish measurable targets, their strategic relevance and practical effectiveness may still require improvement.

Setting Realistic and SMART Organizational Objectives: Table 4.7 indicates weak practice in setting realistic and SMART organizational objectives. A considerable proportion of respondents, specifically 23.35% of managers and 43.05% of employees/staff, strongly disagreed, while 58.75% and 37.15% respectively disagreed that universities formulate realistic and SMART objectives. Only 7.6% of managers and 7.9% of employees reported moderate implementation, whereas 3.45% and 6.25% agreed, and 2.75% and 5.65% strongly agreed. The aggregate mean (M = 2.2515, SD = 0.9709) indicates generally weak implementation. The finding suggests lack of clarity, measurability, and realism in institutional objective formulation.

This finding contradicts the SMART objective framework introduced by Doran (1981), which emphasizes that objectives should be specific, measurable, achievable, relevant, and time-bound to improve managerial effectiveness. Bryson (2018) further notes that poorly defined objectives weaken strategic alignment and performance evaluation. The current

finding therefore indicates weaknesses in translating strategic intentions into practical and measurable objectives.

Prioritizing Tasks: Table 4.7 shows that task prioritization in Ethiopian comprehensive universities is generally weak. About 34.5% of managers and 37.9% of employees/staff strongly disagreed, while 46.15% and 40% respectively disagreed that institutions effectively prioritize tasks. Only 8.75% of managers and 6.15% of employees reported moderate implementation, whereas 3.8% and 6.05% agreed, and 6.9% and 9.65% strongly agreed. The aggregate mean (M = 2.244, SD = 1.0014) confirms weak and inconsistent implementation. The finding suggests deficiencies in execution planning, time management, and operational coordination.

This finding aligns with contemporary strategic management literature emphasizing prioritization as essential for effective implementation and resource optimization. Daft (2021) argues that task prioritization ensures alignment between strategic objectives and operational activities. Likewise, Oreg and Berson (2019) report that weak prioritization contributes to implementation delays and reduced organizational performance. The findings therefore indicate a significant gap between planning and execution practices in universities.

Allocating Adequate Resources: Table 4.7 indicates that resource allocation is critically inadequate in Ethiopian comprehensive universities. A substantial proportion of respondents, specifically 36.45% of managers and 41.95% of employees/staff, strongly disagreed, while 37.7% and 37.95% respectively disagreed that universities allocate adequate resources. Only 13.45% of managers and 7.65% of employees reported moderate allocation, whereas 4.9% and 4.4% agreed, and 7.5% and 2.55% strongly agreed. The aggregate mean (M = 2.026, SD = 1.341) indicates both weak implementation and high variation across institutions. The finding suggests that inadequate financial, human, and infrastructural resources significantly constrain institutional effectiveness and strategy execution.

This finding supports the resource-based view, which emphasizes that adequate and strategic deployment of resources is necessary for sustaining organizational performance and competitive advantage. Barney (1991) argues that insufficient resource allocation undermines institutional capability development and strategic effectiveness. Similarly, Grigoruta and Mironescu (2023) report that resource limitations remain a major barrier to effective strategy implementation in higher education institutions, particularly in developing contexts. The

current finding therefore indicates that resource inadequacy remains a critical challenge affecting strategic management practices in Ethiopian comprehensive universities.

4.5.2. Structural Equation Model for Strategy Formulation (SF)

4.5.2.1. Measurement Model for Strategy formulation (SF)

Strategy formulation (SF) was treated as one of the latent constructs of strategic management practices in this study. The construct was measured using multiple observed indicators(*creating strategic mission, setting strategic goals, developing alternative strategies, selecting the best strategies, setting quantitative targets, setting smart objectives, prioritizing tasks, allocating adequate resources*) designed to assess the extent to which universities systematically analyze internal and external environments to support strategic decision-making. Perceived efficiency and effectiveness were analyzed separately using different metrics because they represent distinct organizational performance dimensions. Therefore efficiency was measured metrics such as *timelines, resource utilization, cost effectiveness, process coordination, decision making speed, while* effectiveness analyzed using metrics such as *goal achievement/strategic alignment student success, institutional reputation, quality of teaching & research outputs, stakeholders satisfaction* in comprehensive universities in Ethiopia.

Table 4.8.-Measurement Model Assessment for Strategy Formulation (SF)

Indicators	Average factor loadings	(α)	CR	(AVE)	Remarks
SF1-SF8	0.827	0 .83	0.961	0.698	Standardized factor loadings ranges 0.769-0856

The measurement model for strategy formulation (SF) was assessed using Confirmatory Factor Analysis (CFA). Reliability was evaluated through Cronbach's alpha and Composite Reliability (CR). The construct achieved a cronbach alpha value of 0.76 and a CR value of 0.961, both exceeding the recommended threshold of 0.70, indicating satisfactory internal consistency reliability. Convergent validity was examined using standardized factor loadings and Average variance extracted (AVE). All factor loadings ranged from 0.765 to 0.854, with average 0.827 surpassing the recommended minimum value of 0.50. Similarly, the AVE value of 0.698 exceeded the threshold of 0.50, confirming adequate convergent validity. Therefore, the indicators consistently and adequately represented the Environmental Scanning construct.

Confirmatory Factor Analysis (CFA) Model Fit)

The CFA was conducted to assess the construct validity of the study variables: Strategy formulation (SF), efficiency (EFFI), and effectiveness (EFFE). The measurement model included 8 indicators for SF and 5 dependent variables each for EFFI and EFFE as shown below.

Table 4.9 CFA Overall Measurement Model Fit

Fit index	Overall CFA values	Recommended threshold	Interpretation
X^2/df	1.467	<2-3	Excellent fit:
GFI	0.887	>0.90(acceptable>0.80)	Slightly below ideal, but acceptable; reasonably captured.
CFI	0.979	> 0.90 → Excellent	Excellent fit:
TLI	0.988	>0.90 → Excellent	Excellent fit
PCFI	0.854	>0.50→ Acceptable	Very good parsimony
RMSEA	0.076	<0.05(good <0.05-0.08 acceptable	Acceptable fit

Where, x2/df= degrees of freedom; GFI=Goodness of fit; CFI= comparative fit; TLI= Tucker Lewis index; PLFS= parsimonious comparative fit; RMSEA= root mean square error of approximation

The confirmatory factor analysis (CFA) indicates that the measurement model demonstrates an overall good fit. Specifically, the χ^2/df value of 1.467 reflects excellent model fit, while the Comparative Fit Index (CFI = 0.979) and Tucker-Lewis Index (TLI = 0.988) indicate excellent comparative fit. The Goodness of Fit Index (GFI = 0.876) is slightly below the ideal threshold but remains acceptable, and the Parsimony-Adjusted CFI (PCFI = 0.854) confirms the model's parsimonious structure. The Root Mean Square Error of Approximation (RMSEA = 0.076) falls within the acceptable range, indicating a reasonable approximation error. Collectively, these results confirm that the observed indicators validly and reliably measure the underlying construct, providing a robust basis for subsequent structural model analysis and hypothesis testing.

From the perspective of Strategic Fit Theory, which emphasizes the alignment between an organization's internal capabilities and its external environment to achieve superior performance, these results provide robust empirical support that the SF construct is well-specified and theoretically coherent. A valid and reliable measurement of strategy formulation ensures that the model accurately captures the extent to which universities design strategies that are aligned with their institutional goals, resources, and environmental

demands. By establishing a well-fitting measurement model, the study demonstrates that strategy formulation in Ethiopian comprehensive universities can be meaningfully linked to operational outcomes such as efficiency and effectiveness, as posited by Strategic Fit Theory. This alignment suggests that when strategy formulation is systematically conceptualized and measured, it provides a strong foundation for assessing how well strategic plans are tailored to institutional strengths and external demands, ultimately enhancing organizational performance.

4.5.2.2. Structural Model Results for Hypothesis Testing

Structural model hypothesis testing measures the strength, direction, and significance of the proposed relationship between latent constructs in a structural equation model. Specifically, it evaluates the path coefficient (β) to determine the effect size, the critical ratio (CR) or p-value to assess statistical significance, and the R^2 of the dependent variable to indicate how much variance is explained by the predictor(s).

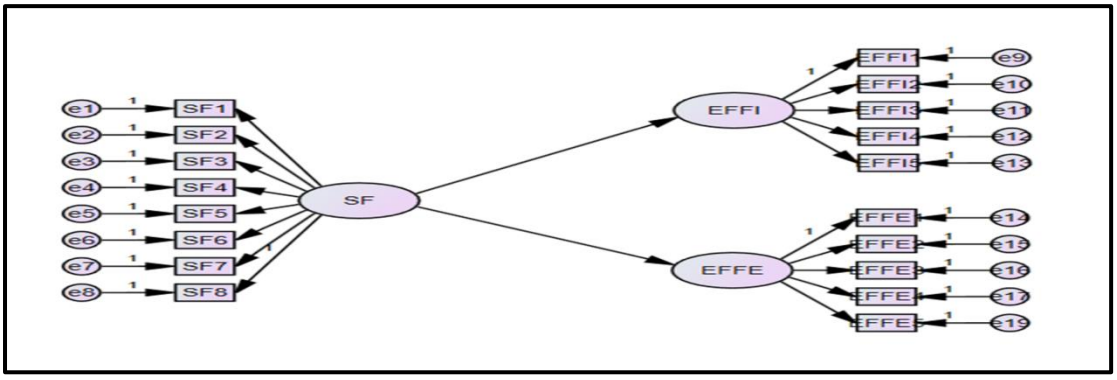
Table 4.10: Structural Model Results: Hypothesis (H2) Testing

Hypothesis	Path	Standardized Coefficient (β)	R^2	C.R	p-value	Result	impact of performance dimension
H2a	SF → EFFI	0.28	.24	3.72	< 0.001	supported	EFFI.
H2b	SF → EFFE	0.18	.20	3.76	< 0.001	supported	EFFE

(***Where C.R*** ≥ *1.96* → ***significant at p < 0.001)***

The structural model results for hypotheses testing for strategy formulation in Table 4.8 indicate that the predictor variable has a strong, positive, and statistically significant effect on both efficiency (EFFI) and effectiveness (EFFE). Specifically, the standardized path coefficient for EFF (β = 0.28) demonstrates a moderate-to-strong positive influence, with a high critical ratio (C.R. = 3.76) exceeding the recommended threshold, and a p-value below 0.001 confirming robust statistical significance. Similarly, the identical estimates for EFE (β = 0.18, C.R. = 3.76, p < 0.001) reveal that improvements in the predictor construct lead to substantial and meaningful gains in institutional effectiveness. The squared multiple correlations (R^2) reveal that 24% of the variance in EFFI and 20% in EFFE are explained by ES, highlighting the construct's substantive predictive power. These findings provide strong empirical support for the proposed hypotheses, indicating that the modeled relationships are consistent with the underlying theoretical framework and that the predictor contributes significantly to enhancing both efficiency and effectiveness outcomes.

Figure 4.2 Path Diagram of Structural Equation Model: Strategy Formulation



Source: SPSS AMOS (2026).

This Structural Equation Model examines the effect of Strategy Formulation (SF) on two key performance outcomes: Efficiency (EFFI) and Effectiveness (EFFE).Strategy Formulation is modeled as a latent construct measured by eight indicators (SF1–SF8), reflecting key strategic planning and formulation practices. Efficiency and Effectiveness are modeled as latent dependent constructs, each measured by five indicators (EFF1–EFFE5 and EFF1–EFFE5, respectively).The structural results indicate that Strategy Formulation has a positive and statistically significant effect on Efficiency ($\beta = 0.28$, CR = 3.72). Similarly, Strategy Formulation also exerts a positive and significant influence on Effectiveness ($\beta = 0.18$, CR = 3.76). Both Critical Ratio values exceed the recommended threshold of 1.96, confirming support for the hypothesized relationships. Overall, the findings suggest that well-designed and clearly articulated strategy formulation processes significantly enhance institutional efficiency and effectiveness, supporting the assumptions of Strategic Fit Theory, which emphasizes alignment between strategic planning and organizational performance.

Moderating Effects of Strategy Formulation: Top management commitment and resource availability were additionally examined as moderating variables because they influence the strength of the relationship between strategic management practices and institutional outcomes.

4.5.3 Qualitative Data Analysis of Strategy Formulation Dimensions

To further explain the quantitative findings on the practice of strategy formulation, semi-structured interviews were conducted with top- and middle-level university managers. The interviews explored how strategic plans are formulated, the extent of stakeholder

participation, and the organizational and institutional factors influencing the effectiveness of strategy formulation in Ethiopian public comprehensive universities. A top management participant from University "E" stated:

> *"The major challenge is that strategy formulation is often treated as a periodic exercise rather than a continuous institutional process. Leadership commitment varies across planning cycles, and there is limited use of evidence generated from monitoring, environmental scanning, and institutional research. In addition, inadequate financial resources, shortages of skilled planning professionals, and weak coordination among university units reduce the quality of strategic planning (4, April, 2025: 4:30").*

Also the development plan unit head from University "C" explained:

> "*In our university, strategy formulation is constrained by limited stakeholder participation and insufficient ownership among academic and administrative units. Strategic plans are frequently developed by a small planning team with limited consultation, resulting in strategies that do not fully reflect institutional realities. Frequent leadership changes and inadequate follow-up also weaken the continuity and institutionalization of the planning process (26, Feb, 2025:300).*

Similarly, one of college dean University "G" mentioned that

> *"One of the main weaknesses is the absence of a strong strategic planning culture. Many staff members perceive strategy formulation as the responsibility of senior management or the planning office instead of a shared institutional responsibility. Limited availability of reliable data, inadequate institutional research, and weak alignment between university priorities and available resources further reduce the quality and practicality of strategic plans." (10 April 2025, 11:00 am).*

Overall, the interview findings revealed that strategy formulation remains inadequately institutionalized across the selected comprehensive universities. Participants consistently identified inconsistent leadership commitment, limited stakeholder participation, weak strategic planning culture, inadequate use of evidence from monitoring and environmental scanning, shortages of skilled planning professionals, insufficient financial resources, weak coordination among university units, frequent leadership turnover, and limited institutional

ownership as the major factors undermining effective strategy formulation. Consequently, strategic plans are often developed as periodic administrative requirements rather than inclusive, evidence-based, and continuous strategic management processes, thereby reducing institutional commitment and the successful implementation of strategic priorities.

Furthermore, interviews were conducted with heads of development planning units to gain a deeper understanding of how the current strategy formulation process, particularly stakeholder participation and leadership involvement, influences institutional ownership, commitment, and the successful implementation of strategic plans. In this regard, the head of the Development Planning Unit at University "G" stated that

> *"When stakeholders actively participate in strategy formulation, they better understand institutional priorities and become more committed to implementing them. However, in many cases participation is limited to selected managers, resulting in weak ownership among academic staff and administrative employees. Consequently, implementation becomes inconsistent because many staff members do not feel responsible for achieving the strategic objectives (23 May, 2025/3:30).*

Similarly, interview was conducted for development plan unit head of university 'D"&stated: mentioned that;

> *"Leadership involvement is essential for creating ownership and accountability throughout the strategy implementation process. Although university leaders usually approve strategic plans, continuous engagement during formulation and implementation is often limited. As a result, communication gaps emerge, staff commitment declines, and implementation activities are not consistently aligned with the university's strategic priorities (16, March 2025/10.30 am).*

Additionally, the same interview question was conducted Academic Vice President University "A" and stated that

> *"The current strategy formulation process encourages some level of consultation through workshops and planning meetings; however, stakeholder participation is not sufficiently inclusive. Students, academic staff, employers, and external partners are often inadequately represented. This limit shared ownership of the strategic plan and reduces*

institutional commitment during implementation because many stakeholders perceive the strategy as a management document rather than a collective institutional agenda

Overall, the interview findings indicate that the current strategy formulation process has a significant influence on institutional ownership, commitment, and the successful implementation of strategic plans. Participants consistently emphasized that meaningful stakeholder participation and sustained leadership involvement foster a shared understanding of institutional priorities, strengthen ownership, and enhance commitment to strategy implementation. However, limited and non-inclusive stakeholder engagement, inadequate leadership involvement throughout the planning process, weak communication, and the exclusion of key stakeholders such as academic staff, students, employers, and external partners reduce institutional ownership and accountability. Consequently, many staff perceives strategic plans as management documents rather than collective institutional agendas, leading to inconsistent implementation and weaker achievement of strategic objectives. The findings from qualitative data analysis strongly align with end, Aithal et al. (2018) suggestion confirming that stakeholder engagement and leadership involvement throughout the planning process is a crucial part of the strategy development process.

4.5.4 Integrated Interpretation of Strategy Formulation Findings

The integrated findings from the quantitative, SEM, and qualitative analyses indicate that although some elements of strategy formulation, particularly mission development and quantitative target setting, are reasonably practiced, the overall strategy formulation process remains weak and inadequately institutionalized across the selected comprehensive universities. The quantitative findings revealed deficiencies in setting strategic goals, developing alternative strategies, selecting strategic options, formulating SMART objectives, prioritizing tasks, and allocating adequate resources. Despite these weaknesses, the SEM results demonstrated that strategy formulation has a positive and statistically significant effect on both institutional efficiency ($\beta = 0.28$, $p < .001$) and effectiveness ($\beta = 0.18$, $p < .001$), confirming that well-designed strategy formulation contributes to improved organizational performance. The qualitative findings further explained that these weaknesses stem from inconsistent leadership commitment, limited stakeholder participation, weak strategic planning culture, inadequate use of evidence, resource constraints, and poor institutional ownership, which reduce commitment to strategy implementation.

These findings are consistent with recent studies emphasizing that effective strategy formulation requires inclusive stakeholder participation, continuous leadership engagement, evidence-based decision-making, and alignment between institutional priorities and available resources. For example, Nguyen et al. (2023) argue that weak goal-setting and limited stakeholder involvement undermine strategic implementation in higher education institutions. Similarly, Elbanna et al. (2022) contend that adaptive and participatory strategy formulation enhances organizational agility and implementation success, while Kaplan and Norton (2020) emphasize that strategies are more likely to succeed when strategic objectives are clearly defined, effectively communicated, and linked to organizational performance. Therefore, the findings suggest that Ethiopian public comprehensive universities should institutionalize participatory and evidence-based strategy formulation processes to strengthen ownership, commitment, and sustainable institutional performance.

4.6. The practices of Communicating the Strategy

The practices of communicating strategies in comprehensive universities play a crucial role in ensuring that institutional goals, priorities, and directions are clearly understood across all levels of the organization. Effective strategy communication facilitates shared understanding, coordination of activities, and alignment of individual and departmental efforts with the overall strategic objectives of the university. Therefore, examining how strategies are communicated within comprehensive universities provides important insights into the effectiveness of strategic management practices and their contribution to successful strategy implementation**.**

4.6.1. Descriptive Analysis of Strategy Communication

Table 4.11 an aggregate responses on the practices of communicating the strategy

Code	How does strategies were communicated at your university?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
SC1	Through E-mail	176	2.42	1.21	30.5	43.9	7.5	8.45	9.7	568	1.81	1.07	42.5	37.3	7.5	8.9	6.35
SC2	Phone conversation	176	1.84	1.27	34.2	39.4	5.95	9.15	11.2	568	2.31	1.13	33.8	44.55	5.55	9.05	7.05
SC3	Using letters	176	4.17	0.69	2.75	9.4	3.25	37.3	47.4	568	4.11	0.7	2.65	4.85	11.1	37.2	44.3
SC4	Conferences& regular meetings	176	4.10	0.69	4.4	11.4	10.5	32.2	41.7	568	3.79	0.69	4.45	10	15.4	52.8	37.3
SC5	University website	176	1.43	1.28	48.6	30.5	7.4	6.85	6.5	568	2.05	1.06	49.7	31.5	7.7	6.45	4.85
SC6	Cascading the strategies	176	3.867	1.00	4	6.65	9.9	47.9	31.7	568	3.71	1.02	5.1	7.5	6.35	48.65	32.5
SC7	Regular reports	176	4.07	0.87	1.7	4.3	4.8	43.7	45.7	568	4.57	0.99	2.2	5.7	11	40.9	54.2
SC8	Virtual Meeting Platforms & Webinars	176	1.05	0.83	97.8	0.7	0.5	0.5	0.5	568	1.42	0.83	81.3	14.2	2.25	0.55	2.25
	Average		2.87								2.97						

Source: Field Survey Data (2024/25).

Through e-mail: Table 4.11 indicates that the use of e-mail as a strategic communication tool in Ethiopian comprehensive universities is weak. A substantial proportion of respondents 30.5% of managers and 42.5% of employees/staff strongly disagree, while 43.9% and 37.3% respectively disagree that e-mail is effectively used for strategic communication. The low aggregate mean (M = 2.121, SD = 1.1351) confirms limited and inconsistent adoption. Only a small proportion report some level of use, with 7.5% of both managers and employees indicating moderate application, 8.45% and 8.9% agreeing, and 9.7% and 6.35% strongly agree. Overall, the findings suggest that universities are not effectively leveraging e-mail for strategic communication, indicating weak digital integration in institutional information dissemination processes. From a scholarly perspective, email remains a foundational tool in organizational communication due to its ability to provide asynchronous, documented, and scalable communication across hierarchical levels. Dubrin, (2021) emphasizes that digital communication tools such as email enhance coordination and information sharing when integrated into formal communication systems. However, recent studies suggest that ineffective email practices such as lack of clarity, overload, or absence of feedback mechanisms can reduce its strategic value (Men et al., 2021). Thus, the findings reflect not merely non-use, but potentially ineffective institutionalization of email communication, indicating a gap in digital communication competencies.

Phone conversation: Table 4.11 shows that the use of phone conversation as a strategic communication tool in Ethiopian comprehensive universities is generally weak. A considerable proportion of respondents 34.15% of managers and 33.85% of employees/staff strongly disagree, while 34.15% of managers and 44.55% of employees disagree that phone communication is effectively utilized. The low aggregate mean (M = 2.074, SD = 1.199) indicates limited and inconsistent institutional practice. Only a small proportion report some level of use, with 5.95% of managers and 5.55% of employees indicating moderate utilization, 9.15% and 9.05% agreeing, and 11.2% and 7.05% strongly agreeing. Overall, the findings suggest that phone-based communication is not systematically integrated into strategic communication processes, reflecting weak coordination and underutilization of basic communication channels in institutional management. The low mean (M = 2.074, SD = 1.199) indicates that phone communication is also weakly utilized in strategy communication. This suggests limited reliance on direct, synchronous communication channels. In contrast, organizational communication theory highlights the importance of rich communication media such as phone conversations for immediate feedback and clarification.

According to Daft (2021) Media Richness Theory, communication effectiveness increases when richer media are used for complex or ambiguous messages. The findings therefore suggest that universities may be relying on less interactive communication forms, limiting opportunities for clarification, engagement, and shared understanding during strategy communication.

Using letters: Table 4.11 indicates that written/official letters are the dominant communication tool for conveying strategies in Ethiopian comprehensive universities. Only a small proportion of respondents 2.75% of managers and 2.65% of employees/staff strongly disagree, while 9.4% and 4.85% respectively disagree that such tools are consistently used. The high aggregate mean (M = 4.1395, SD = 0.6999) reflects strong and relatively consistent institutional practice. A minority report moderate use (3.25% of managers and 11.1% of employees), whereas the majority confirm strong utilization, with 37.3% of managers and 37.15% of employees agree, and 47.4% and 44.3% strongly agreeing. Overall, the findings suggest that official written communication remains the most institutionalized and reliable channel for strategy dissemination, indicating a formalized and bureaucratically anchored communication structure within universities. The high mean (M = 4.1395, SD = 0.6999) indicates strong reliance on formal written communication. This reflects a traditional bureaucratic communication structure. This finding aligns with classical administrative theory, where formal documentation ensures accountability, traceability, and legitimacy. Weber (1978) emphasized formal written communication as a defining feature of bureaucratic organizations. However, contemporary scholarship cautions that over-reliance on formal communication may reduce flexibility and responsiveness (Bryson, 2018). Thus, while effective for formalization, letters alone may not support dynamic strategic communication needs.

Conferences and regular meetings: Table 4.11 shows that conferences and regular meetings are widely used as strategic communication tools in Ethiopian comprehensive universities. Only a small proportion of respondents 4.4% of managers and 4.45% of employees/staff strongly disagree, while 11.35% and 10% respectively disagree that such practices are consistently applied. The aggregate mean (M = 3.951, SD = 0.6951) indicates a high and relatively consistent level of implementation. A minority report moderate use, with 10.45% of managers and 15.35% of employees, whereas the majority confirm strong utilization: 32.2% of managers and 52.8% of employees agree, and 41.7% and 37.3% strongly agree.

Overall, the findings suggest that formal face-to-face communication through conferences and meetings is a well-established mechanism for strategy dissemination and coordination within the universities. The relatively high mean (M = 3.951, SD = 0.6951) indicates that face-to-face communication through meetings is widely practiced. This is consistent with participatory management theory, which highlights meetings as platforms for dialogue, consensus-building, and shared understanding. Mintzberg, (2009) argues that informal and face-to-face interactions are central to effective strategy communication and sense-making. Recent studies also confirm that interactive forums such as meetings enhance employee engagement and strategic alignment (Elbanna et al., 2022). Therefore, this dimension represents a relative strength in the universities' communication practices.

University Website and Online portal: Table 4.11 indicates that the university website is largely underutilized for strategic communication in Ethiopian comprehensive universities. A dominant proportion of respondents 48.6% of managers and 49.65% of employees/staff strongly disagree, while 30.45% and 31.5% respectively disagree that websites are used for communicating strategies. The very low aggregate mean (M = 1.742, SD = 1.169) confirms weak institutional adoption with notable perceptual variation. Only a small proportion report some level of use, with 7.4% of managers and 7.7% of employees indicating moderate utilization, 6.85% and 6.45% agreeing, and 6.5% and 4.85% strongly agreeing. Overall, the findings suggest that digital web-based platforms remain largely ineffective as strategic communication channels, reflecting a persistent gap in institutional digital transformation and information dissemination practices. This finding contradicts modern digital communication practices, where institutional websites serve as key platforms for transparency, stakeholder engagement, and knowledge dissemination. Castells, (2010) emphasizes the centrality of digital networks in contemporary organizational communication. Recent higher education research highlights that universities increasingly rely on digital platforms to communicate strategy to internal and external stakeholders (Selwyn, 2020). The low utilization observed suggests a significant digital communication gap.

Cascading the Strategies to Colleges : As indicated in Table 4.11, 4% of the managers, 5.1% of the employees/staff depicted that they strongly disagree that their respective universities uses cascading to communicate strategies, while 6.65% of the managers, 7.5% of the employees/ staff disagree that their respective universities uses cascading to communicate strategies. Also, 9.9% of managers and 6.35% employees revealed that their university

moderately uses cascading to communicate strategies. However, 47.9% of the managers, 48.65% of the employees/staff depicted that they agree that their respective universities uses cascading to communicate strategies, while 31.7% of the managers, 32.5% of the employees/ staff strongly agree that their respective universities uses cascading to communicate strategies with an aggregate mean of 3.787 and a standard deviation of .9667, which is good. The good mean (M = 3.787, SD = 0.9667) indicates effective use of cascading mechanisms to communicate strategies across organizational levels. This aligns with strategic alignment theory, where cascading ensures that organizational goals are translated into departmental and individual objectives. Kaplan &Norton, (2020), emphasize cascading as essential for linking strategy to operations. Thus, this dimension reflects a relatively strong internal alignment mechanism within universities.

Regular reports: Table 4.11, shows that 1.7% of the managers, 2.2% of the employees/staff strongly disagree that their respective universities uses written regular reports to communicate strategies, while 4.3% of the managers, 5.7% of the employees/ staff disagree that their respective universities uses regular reports to communicate strategies. Also, 4.8% of managers and 11% employees revealed that their university moderately uses hand written regular reports to communicate strategies. However, 43.7% of the managers, 40.9% of the employees/staff depicted that they agree that their respective universities uses regular reports to communicate strategies, while 45.7% of the managers, 54.2% of the employees/ staff strongly agree that their respective universities uses written regular reports to communicate strategies with an aggregate mean of 4.322 and a standard deviation of .9340, which is very good. The very high mean (M = 4.322, SD = 0.9340) indicates strong reliance on reporting systems. Performance management literature identifies reporting as a critical tool for monitoring progress and ensuring accountability. Neely, (2020), highlights that regular reporting supports organizational learning and strategic control. However, excessive reliance on reporting without interactive communication may limit feedback and adaptability (Marr, 2021). Thus, while strong, this practice should be complemented with more dynamic communication channels.

Virtual Meeting Platforms and Webinars: Table 4.11 shows that virtual meeting platforms and webinars are minimally used for strategic communication in Ethiopian comprehensive universities. An overwhelming majority 97.8% of managers and 81.25% of employees/staff strongly disagree, while 0.7% and 14.2% respectively disagree that such tools are applied.

The extremely low aggregate mean (M = 1.236, SD = 1.297) confirms near absence of institutional adoption. Only marginal proportions report any use, with 0.5% of managers and 2.25% of employees indicating moderate utilization, 0.5% and 0.55% agree, and 0.5% and 2.25% strongly agreeing. Overall, the findings demonstrate that virtual and webinar-based communication remains largely absent from strategic management practice, indicating a strong persistence of traditional communication modes and a significant lag in digital transformation of institutional communication systems. The extremely low mean (M = 1.236) indicates almost complete absence of virtual communication tools. This sharply contrasts with global trends in higher education, where digital platforms have become central to communication, especially after COVID-19 pandemic. Laurillard, (2012) emphasizes that digital platforms enhance collaboration, accessibility, and real-time engagement. Recent studies show that institutions failing to adopt virtual tools risk reduced agility and stakeholder engagement (Bond et al., 2021). The findings therefore reveal a critical modernization gap in communication practices.

The overall findings reveal a clear structural imbalance in communication practices. Universities strongly rely on formal, traditional channels (letters, reports, meetings), while digital and interactive communication tools (email, websites, virtual platforms) remain underutilized. From a theoretical standpoint, this reflects a bureaucratic communication model rather than a networked or knowledge-based communication system .Contemporary strategic management literature emphasizes that effective strategy communication requires a combination of formal mechanisms (for accountability), and interactive/digital platforms (for engagement and alignment). The observed imbalance suggests that universities may achieve formal compliance in communication but lack strategic communication effectiveness, particularly in terms of responsiveness, inclusiveness, and technological adaptation.

4.6.2 Correlation Analysis of strategy Communication

This study uses correlation analysis to examine the strengths and direction of the relationships among different strategy communication mechanisms in comprehensive universities, highlighting how various channels co-vary and affect the effectiveness of strategic information dissemination. The value of the correlation coefficient from 0 to 1 is positive correlation, and it designates proportional growth of values in both data sets. 0 and -1 indicate negative correlation. "0" indicates no correlation which shows that there is no association between the factors. Based on the above premise, Pearson's correlation coefficient

analysis was performed at a 95% confidence interval and a 5% confidence level, 2-tailed, to examine the statistical relationship between each independent variable and strategy formulation in selected public comprehensive universities in Ethiopia, as shown in Table

Table 4 12. Correlation Analysis of Strategy Communication

Items		Through email	phone conversation	use letter	confernce & regular meeting	university website	cascading strategies to colleges	regular reports	virtual meeting platforms & webinars
Through email	Pearson Cor.	1							
	Sig. (2-tailed)								
phone conversation	Pearson Cor.	.090*	1						
	Sig. (2-tailed)	0.027							
use letters	Pearson Cor.	-.198**	.386**	1					
	Sig. (2-tailed)	0	0						
conferences& regular meetings	Pearson Cor.	-0.036	.365**	.709**	1				
	Sig. (2-tailed)	0.378	0	0					
university website	Pearson Cor.	-0.036	.334**	0.365	.729**	1			
	Sig. (2-tailed)	0.378	0	0	0				
cascading the strategies to colleges	Pearson Cor.	0.061	-.114**	-.136**	-.133**	.148**	1		
	Sig. (2-tailed)	0.131	0.005	0.001	0.001	0.001			
regular reports	Pearson Cor.	.444**	-.124**	-.475**	-.389**	.284**	.294**	1	
	Sig. (2-tailed)	0	0.002	0	0	0	0		
virtual meeting platforms & webinars	Pearson Cor.	.455**	0.045	-.217**	-.157**	.218**	.632**	.734**	1
	Sig. (2-tailed)	0	0.265	0	0	0	0		0

N.744. *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

***Source*: SPSS Result of the Correlation analysis**

The correlation analysis measured the strength and direction of the relationships among different mechanisms used for strategy communication in comprehensive universities, including email, phone conversations, letters, conferences and regular meetings, university websites, cascading strategies to colleges, regular reports, and virtual meeting platforms &

webinars. The analysis is based on a sample size of 744, and significance is reported at both the 0.05 (*) and 0.01 (**) levels.

***Through Email*:** Communication via email showed a positive and significant relationship with regular reports ($r = 0.444$, $p < 0.01$) and virtual meeting platforms & webinars ($r = 0.455$, $p < 0.01$), indicating that universities that frequently use email also tend to rely on structured reporting and online platforms for strategy dissemination. Email had a weak but significant positive correlation with phone conversations ($r = 0.090$, $p < 0.05$). Other correlations with conferences, letters, or cascading strategies were not significant. *Phone Conversations*: Using phone conversations as a communication tool was positively and significantly correlated with the use of letters ($r = 0.386$, $p < 0.01$) and conferences & regular meetings ($r = 0.365$, $p < 0.01$), suggesting that verbal interactions complement more formal communication channels. However, it was negatively correlated with cascading strategies to colleges ($r = -0.114$, $p < 0.01$) and regular reports ($r = -0.124$, $p < 0.01$), implying that institutions emphasizing direct phone communication may do so at the expense of more structured dissemination approaches. *Use of Letters:* Interestingly, letter-based communication showed a significant negative correlation with email ($r = -0.198$, $p < 0.01$), indicating that reliance on letters may substitute for email. Letters were positively correlated with phone conversations ($r = 0.386$, $p < 0.01$) and strongly correlated with conferences & regular meetings ($r = 0.709$, $p < 0.01$), highlighting that letters are often part of a formal, meeting-centered communication strategy. However, letters were negatively correlated with regular reports ($r = -0.475$, $p < 0.01$). *Conferences & Regular Meetings*: This mechanism was highly positively correlated with letters ($r = 0.709$, $p < 0.01$) and significantly correlated with phone conversations ($r = 0.365$, $p < 0.01$), showing the interlinkage of formal and interactive communication approaches. It was negatively correlated with regular reports ($r = -0.389$, $p < 0.01$), suggesting that meeting-intensive communication might reduce reliance on written reporting.

Moreover, *University Website*: as communication mechanism was Strong correlations with letters ($r = 0.365$, $p < 0.01$) and conferences ($r = 0.729$, $p < 0.01$) indicate that web platforms primarily support formalized, structured communications. Positive correlation with cascading strategies ($r = 0.148$, $p < 0.01$) suggests limited, but present, effectiveness in strategy dissemination. *Cascading Strategies to Colleges*: The use of cascading strategies correlated positively with regular reports ($r = 0.284$, $p < 0.01$) and virtual meeting platforms & webinars

(r = 0.218, p < 0.01), but negatively with letters (r = -0.136, p < 0.01) and conferences (r = -0.133, p < 0.01). This suggests that cascading strategies are implemented more through structured reporting and digital means than traditional letters or in-person meetings. *Regular Reports***:** This channel is positively correlated with email (r = 0.444, p < 0.01), cascading strategies (r = 0.284, p < 0.01), and virtual meeting platforms & webinars (r = 0.632, p < 0.01), highlighting its central role in structured and modern strategy communication. Negative correlations with phone conversations (r = -0.124, p < 0.01), letters (r = -0.475, p < 0.01), and conferences (r = -0.389, p < 0.01) indicate that emphasis on reporting may reduce reliance on less formal or traditional communication. *Virtual Meeting Platforms & Webinars***:** This modern digital communication method is positively associated with email (r = 0.455, p < 0.01), letters (r = 0.217, p < 0.01), cascading strategies (r = 0.218, p < 0.01), and regular reports (r = 0.632, p < 0.01), emphasizing its integration with multiple communication channels. Weak or non-significant correlations with phone conversations (r = 0.045, p > 0.05) suggest that virtual platforms complement rather than replace personal calls.

In conclusion, the correlation structure underscores a dual-mode strategy communication: modern digital and formal reporting channels drive strategy dissemination, while traditional methods and informal conversations play a secondary or complementary role. This insight is crucial for designing integrated, multi-channel strategy communication in comprehensive universities.

4.6.3 Qualitative Analysis of Strategy Communication

Although the quantitative findings revealed the extent to which strategy communication practices are implemented, they did not fully explain the organizational and contextual factors underlying these practices. Therefore, semi-structured interviews were conducted with university leaders and planning officials to gain deeper insights into why universities continue to rely predominantly on conventional communication mechanisms while underutilizing digital communication platforms, and to identify the organizational, technological, and resource-related barriers limiting the adoption of modern communication systems. In this regard, middle managers from University “C” revealed that

> *“Our university still depends largely on face-to-face meetings, circular letters, and official memos because these are the traditional communication channels familiar to most employees. The adoption of digital communication platforms is constrained by*

inadequate ICT infrastructure, unreliable internet connectivity, limited financial resources, and insufficient training on digital technologies. Consequently, communication remains slower and less interactive than required for effective strategy implementation" (10 March 2024: 3, 30 AM).

Also, a top manager from University "G" revealed that:

"*Although the university has introduced some digital communication tools, their utilization remains limited due to weak institutional support and low digital competency among employees. Many staff members are reluctant to adopt new technologies because of inadequate training and resistance to organizational change. In addition, poor system integration and the absence of clear institutional policies for digital communication discourage their effective use (18, April, 2024; 2.30 A).*

Similarly, the same interview question was requested, a top manager from University "F" revealed that

"The limited use of digital communication platforms is mainly associated with resource constraints and organizational culture. Many universities have not invested sufficiently in modern communication technologies, and leadership often continues to rely on conventional methods. As a result, important strategic information is not always communicated efficiently to all employees, particularly those working in geographically dispersed campuses (23, October, 2024: 11:25 AM).

Overall, the interview findings revealed that universities continue to rely primarily on conventional communication mechanisms due to inadequate ICT infrastructure, unreliable internet connectivity, limited financial resources, weak institutional support, low digital competency among employees, insufficient training, resistance to organizational change, poor system integration, and the absence of clear digital communication policies. These organizational, technological, and resource-related challenges have hindered the effective adoption of modern communication platforms, resulting in slower information dissemination and reduced effectiveness of strategy communication across the universities.

Furthermore, semi-structured interviews were conducted with top and middle-level managers and heads of development planning units to gain a deeper understanding of how the current

strategy communication system influences employees' awareness, participation, commitment, and overall implementation of institutional strategic plans. In this regard, a middle manager from University “H” revealed that:

> ***“****Effective communication enables employees to understand the university's strategic priorities and their individual responsibilities, thereby increasing their commitment to implementation. However, because communication is often limited to management meetings and formal reports, many employees have only a partial understanding of the strategic plan, which weakens their participation and accountability (24 Dec.2024: 4.30 PM).*

Also, a top manager from University “E” revealed that

> *“The current communication system creates some awareness through planning workshops and departmental meetings, but information is not consistently disseminated across all organizational levels. As a result, many employees do not feel adequately involved in the implementation process, reducing their sense of ownership and commitment to achieving institutional goals (16, Jan.2025: 3.30 AM).*

Additionally, the same interview question was conducted for managers to support the quantitative data with qualitative data. As a result, the top management body from University “H” revealed that:

> *“When strategic information is communicated openly and continuously, employees become more motivated to contribute to institutional objectives. However, the existing communication process is largely one-way, with limited opportunities for feedback and dialogue. This reduces employee engagement, weakens collaboration, and affects the successful implementation of strategic initiatives (28 Feb. 2025; 10:00 pm).*

Overall, the interview findings indicate that the current strategy communication system plays a crucial role in shaping employees' awareness, participation, and commitment to implementing institutional strategic plans. Participants consistently emphasized that effective and continuous communication enhances employees' understanding of strategic priorities, strengthens ownership, and promotes commitment to implementation. However, communication is often confined to management meetings, workshops, and formal reports,

with limited dissemination across all organizational levels and few opportunities for feedback. Consequently, many employees have only a partial understanding of institutional strategies, reducing their participation, accountability, collaboration, and overall effectiveness in implementing strategic plans.

4.6.4 Overall Integration and Explanatory Interpretation for Strategy Communication

The findings from the quantitative, correlation, and qualitative phases collectively demonstrate that strategy communication practices in Ethiopian comprehensive universities are characterized by a coexistence of strong traditional communication mechanisms and weak adoption of digital communication platforms. The descriptive findings indicate that universities predominantly rely on formal and bureaucratic communication approaches, particularly written letters (M = 4.14, SD = 0.70), regular reports (M = 4.32, SD = 0.93), conferences and regular meetings (M = 3.95, SD = 0.70), and cascading strategies to colleges (M = 3.79, SD = 0.97). In contrast, digital and interactive communication mechanisms, including email (M = 2.12, SD = 1.14), university websites and online portals (M = 1.74, SD = 1.17), and virtual meeting platforms/webinars (M = 1.24, SD = 1.30), were found to be weakly implemented. This pattern suggests that Ethiopian comprehensive universities continue to communicate strategies primarily through hierarchical and formal structures rather than through integrated, technology-enabled communication systems.

The dominance of written communication channels reflects the persistence of bureaucratic communication practices within public universities. The strong utilization of official letters and reports indicates that universities prioritize documentation, accountability, and administrative control in disseminating strategic information. This finding is consistent with Weber's bureaucratic theory, which emphasizes formal written communication as a mechanism for maintaining organizational legitimacy, consistency, and control. However, contemporary strategic management scholars argue that while formal communication ensures accountability, it may not sufficiently promote engagement, dialogue, and shared understanding, which are essential for successful strategy implementation (Bryson, 2018; Kaplan & Norton, 2020). Therefore, the findings imply that Ethiopian comprehensive universities have developed communication structures that support administrative compliance but remain limited in fostering interactive strategic alignment.

The quantitative evidence further indicates that face-to-face communication mechanisms remain important components of strategy dissemination. The relatively high mean score for conferences and regular meetings (M = 3.95) demonstrates that universities continue to use interactive forums to communicate institutional priorities. This finding aligns with Mintzberg's (2009) argument that strategy is not only formulated through formal planning processes but also through continuous interaction, dialogue, and sense-making among organizational members. Similarly, recent studies emphasize that meetings and participatory communication platforms enhance employees' understanding of organizational goals and strengthen strategic commitment (Elbanna et al., 2022). However, the qualitative findings reveal that such meetings are often limited to managerial levels and do not always reach employees across different organizational layers. As one middle manager from University "H" explained, communication is frequently restricted to management meetings and formal reports, resulting in partial employee understanding of strategic priorities. This suggests that although universities possess communication mechanisms, their effectiveness is constrained by limited horizontal and downward dissemination.

The correlation analysis provides additional evidence regarding the structure of strategy communication practices. The significant positive relationship between email and regular reports ($r = 0.444$, $p < 0.01$) and between email and virtual meeting platforms ($r = 0.455$, $p < 0.01$) indicates that digital communication channels tend to operate together where they exist. Similarly, regular reports showed a strong relationship with virtual communication platforms ($r = 0.632$, $p < 0.01$), suggesting that institutions with stronger reporting systems are more likely to adopt emerging digital communication practices. These findings imply that digital transformation in communication is not an isolated technological issue but rather part of a broader institutional communication capability. Organizations with established information management systems appear better positioned to integrate digital platforms into strategic communication processes.

Conversely, the negative relationship between traditional communication mechanisms and some modern approaches highlights an institutional transition challenge. For example, letters were negatively correlated with email ($r = -0.198$, $p < 0.01$) and regular reports ($r = -0.475$, $p < 0.01$), while conferences were negatively associated with regular reports ($r = -0.389$, $p < 0.01$). This suggests that universities heavily dependent on traditional channels may experience slower movement toward technology-based communication systems. The

correlation pattern supports the argument of digital transformation scholars that organizational culture and established routines often influence technology adoption more strongly than technology availability alone (Selwyn, 2020). In this regard, the universities appear to be operating within a transitional communication environment where traditional bureaucratic approaches coexist with emerging digital practices.

The qualitative findings provide deeper explanations for the weak adoption of digital communication tools identified in the survey results. Interview participants consistently identified inadequate ICT infrastructure, unreliable internet connectivity, limited financial resources, insufficient digital skills, weak institutional support, and resistance to technological change as major barriers. For instance, a middle manager from University "C" explained that universities continue relying on circular letters and face-to-face meetings because these approaches are familiar to employees, while limited infrastructure and digital competencies constrain technology adoption. Similarly, managers from Universities "F" and "G" emphasized that weak leadership commitment, absence of digital communication policies, and inadequate investment in communication technologies have restricted effective utilization of online platforms.

These qualitative explanations strongly support the quantitative results showing extremely low utilization of websites (M = 1.74) and virtual platforms (M = 1.24). The convergence between survey and interview findings indicates that the limited use of digital communication is not simply a matter of employee preference but reflects deeper institutional capacity limitations. This finding is consistent with recent higher education research emphasizing that successful digital transformation requires not only technological infrastructure but also leadership commitment, organizational readiness, employee capability development, and supportive institutional policies (Bond et al., 2021; Selwyn, 2020).

Furthermore, the qualitative findings demonstrate that weaknesses in communication mechanisms have consequences for strategy implementation effectiveness. Interview participants reported that limited dissemination, one-way communication patterns, and insufficient feedback opportunities reduce employee awareness, ownership, and commitment toward institutional strategies. A top manager from University "E" noted that although workshops and departmental meetings create some awareness, inconsistent dissemination prevents many employees from developing a sense of involvement in strategic implementation. This finding supports strategic alignment theory, which argues that

organizational strategies become effective only when employees understand strategic priorities and perceive their role in achieving institutional goals (Kaplan & Norton, 2020).

Overall, the integrated findings reveal a communication paradox within Ethiopian comprehensive universities. On the one hand, universities demonstrate relatively strong formal communication structures through letters, reports, meetings, and cascading mechanisms. On the other hand, they show limited capacity to utilize digital, interactive, and inclusive communication platforms. Therefore, strategy communication appears effective in terms of administrative transmission but less effective in terms of engagement, participation, and organizational learning. Contemporary strategic management literature emphasizes that successful strategy implementation requires communication systems that combine formal accountability mechanisms with interactive dialogue and digital connectivity (Bryson, 2018; Elbanna et al., 2022). Consequently, Ethiopian comprehensive universities need to move beyond traditional information dissemination approaches toward integrated communication ecosystems that combine formal documentation, participatory dialogue, and digital platforms to improve strategic alignment and implementation effectiveness.

4.7. The approaches to Develop Strategies

4.7.1. Descriptive Analysis of approaches to strategy Development

Data analysis was made to investigate the approach employed to develop strategies in target universities. To determine the dominant SM strategy, the level of implementation of each of the four techniques was assessed using sub-scaled items. The two group participants were asked to provide insight on the prevalent technique utilized to build strategies at respective universities. Accordingly, the responses from the two groups were analyzed separately in Table 4.11, shown below.

Table 4.13: Approach to Develop Strategies

Code	To what extent do the following approaches were used to develop strategies at your universities?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
SMA1	Top-down approach	176	4.48	0.86	1.7	6.3	5.45	23.6	63.2	568	4.37	0.82	1.65	2.2	7	36.4	52.8
SMA1	Bottom -up approach	176	2.37	1.03	52.1	30.3	10.9	3.35	2.8	568	2.31	0.96	51.5	33.8	3.7	6.25	4.7
SMA1	Applies both equally	176	1.81	0.99	44.3	41.3	7.4	4.9	2.2	568	2.02	1.43	38.5	43	10.7	2.3	5.55
SMA1	Guided by ministry of education	176	3.67	1.04	3.85	7.75	8.35	38.3	41.9	568	3.58	1.02	3.8	11.9	10.7	36.2	37.6
	Average		3.08		25.5	21.4	8.04	17.5	27.5		3.07	1.06	23.9	22.7	8.01	20.3	25.2

Source: Field Survey Data (2024/25).

Top-down approach: As shown in Table 4.13, 63.15% of the managers and 52.8% of the employees/staff strongly agree that their university uses a top-down approach for SM practices, with an aggregate mean of 4.480 and a standard deviation of 0.8638**,** while 23.55% of the managers and 36.4% of the employees/staff agree that their university uses a top-down approach for strategic management practices**.** Additionally, 5.45% of managers and 7% of employees reported that their university employs a moderate top-down approach to strategy development. Meanwhile, 6.3% of managers and 2.2% of employees disagree that their university uses a top-down approach for strategic management practices**,** while 1.7% of managers and 1.65% of employees strongly disagree that their university uses a top-down approach for strategic management practices. The findings (M = 4.480, SD = 0.8638) indicate a strong dominance of the top-down approach in strategic management practices across the universities. The overwhelming agreement among both managers and employees suggests that strategy formulation is largely centralized, with decisions flowing from senior leadership to lower organizational levels. This finding aligns with classical strategic management theory, where strategy formulation is viewed as a deliberate and hierarchical process led by top management. Chandler, (1962) emphasized that "structure follows strategy," highlighting the central role of leadership in defining organizational direction. Similarly, Ansoff, (1988) conceptualized strategy as a formal planning process driven by top executives. However, contemporary scholarship critiques excessive reliance on top-down approaches, particularly in complex and knowledge-intensive organizations such as universities. Mintzberg,(2009), argues that purely top-down strategies often fail to capture operational realities and limit organizational learning. Recent studies further indicate that over-centralization reduces employee engagement and weakens implementation effectiveness (Elbanna et al., 2022). Thus, while the strong presence of a top-down approach ensures strategic control and alignment, the findings suggest a risk of limited participation, reduced ownership, and weaker adaptability**.**

Bottom-up approach*/ *Demand-Based Management approach: Table 4.13 shows that the bottom-up approach in strategic management practices is largely absent in Ethiopian comprehensive universities. A majority of respondents52.1% of managers and 51.5% of employees/staff strongly disagree, while 30.3% and 33.8% respectively disagree that such participatory mechanisms are applied. The low aggregate mean (M = 2.339, SD = 0.9851) confirms weak institutionalization of bottom-up strategy formulation. Only a small proportion report partial or positive practice, with 10.95% of managers and 3.7% of

employees indicating moderate use, 3.35% and 6.25% agreeing, and 2.8% and 4.7% strongly agrees. Overall, the findings indicate that strategic decision-making remains predominantly top-down, with minimal involvement of lower-level staff, reflecting limited participatory governance in strategy development processes. This finding contrasts sharply with contemporary strategic management thinking, which emphasizes participatory and inclusive approaches. Hamel, & Prahalad, (1999) advocate for co-creation and distributed strategy processes, where employees contribute insights from operational levels. In higher education contexts, participatory governance is particularly critical due to the professional autonomy and expertise of academic staff (Bryson, 2018). Recent empirical studies show that bottom-up engagement enhances commitment, innovation, and implementation success (Oreg & Berson, 2019). Therefore, the findings indicate a significant gap in participatory strategic management, which may undermine institutional responsiveness and staff commitment.

Apply both Equally: As specified in Table 4.13, 44.25% of the managers and 38.45% of the employees/staff strongly disagree that their university uses both approaches equally for SM practices, with an aggregate mean of 1.914 and a standard deviation of 0.9884**.** In comparison**,** 41.3% of the managers and 43% of the employees/staff disagree that their university uses both approaches equally for strategic management practices**.** Additionally, 7.4% of managers and 10.7% of employees reported that their university employs both approaches moderately and equally to strategy development. Meanwhile, 4.9% of managers and 2.3% of employees agree that their university uses both approaches equally for strategic management practices**,** while 2.2% of managers and 5.55% of employees strongly agree that their university uses both approaches equally for strategic management practices. The very low mean (M = 1.914, SD = 0.9884) indicates that universities rarely integrate both top-down and bottom-up approaches. This suggests a lack of hybrid or balanced strategic management practices. Modern strategic management literature strongly supports the integration of deliberate (top-down) and emergent (bottom-up) strategies. Mintzberg, (2020), introduced the concept of emergent strategy, emphasizing that effective strategies evolve through interaction between leadership intent and operational insights. Similarly, dynamic capabilities theory highlights the importance of combining centralized direction with decentralized learning to adapt to changing environments (Teece, 2018). The absence of such integration in the findings indicates that universities may struggle with strategic flexibility and innovation. Thus, the results reflect a predominantly rigid planning model, lacking the adaptive capacity required in contemporary higher education systems.

It is guided by the Ministry of Education: The findings indicate that strategy formulation in Ethiopian comprehensive universities is substantially guided by the Ministry of Education, reflecting a centralized policy-driven governance structure. A large proportion of respondents 41.9% of managers and 37.6% of employees/staff strongly agree, while 38.25% and 36.2% respectively agree that strategy development is ministry-directed. The aggregate mean (M = 3.623, SD = 1.0354) confirms a moderately high level of perceived external influence on institutional strategy formulation. Only a minority report limited alignment, with 8.35% of managers and 10.65% of employees indicating moderate guidance, 7.75% and 11.9% disagreeing, and 3.85% and 3.8% strongly disagreeing. Overall, the results suggest that while universities retain some autonomy in strategic processes, their strategy formulation is predominantly shaped by national policy directives, indicating strong central steering in higher education governance. This finding is consistent with public sector governance theory, which emphasizes the role of central authorities in guiding institutional strategy. Hood, (1991) notes that hierarchical control is a defining feature of public organizations. However, contemporary higher education governance literature advocates for a balance between external regulation and institutional autonomy. According to Clark, (1983), excessive external control may limit innovation and responsiveness, while moderate guidance can enhance coordination and policy alignment. Recent studies further highlight that effective strategy formulation in universities requires alignment between national priorities and institutional context (Enders et al., 2019). The mixed perceptions observed in the findings suggest that while ministerial guidance provides direction, it may also constrain institutional flexibility.

4.7.2. Qualitative Data Analysis for approach adopted to develop strategies

To further explain the quantitative finding that strategy formulation in the selected comprehensive universities is predominantly top-down, with limited bottom-up or demand-driven participation, qualitative interviews were conducted with top managers, middle-level managers, and heads of planning units. The primary aim of the qualitative phase was to explore why participatory strategy formulation remains limited by examining the institutional, organizational, leadership, and contextual factors that shape stakeholder involvement in the strategy formulation process. In particular, the interviews sought to answer the question: Why is participatory strategy formulation limited in comprehensive

universities? In this regard interview was held with administrative Vice President from University “H” revealed that

> "*In practice, strategy formulation in our university is largely influenced by national higher education policies and the strategic priorities set by the Ministry of Education. Since universities are expected to align their institutional strategic plans with these national frameworks, there is often limited flexibility to accommodate extensive bottom-up participation. Although we organize consultative meetings with colleges and administrative units, time constraints, the need to meet government planning deadlines, and the desire to maintain institutional consistency mean that many strategic decisions are finalized by the university's top leadership. As a result, participation tends to be more consultative than genuinely collaborative.*" *(10, February, 2025:3:30 PM)*

Similar question forwarded to a middle manager (one College dean) from University “B” and indicated that

> *"Participation during strategy formulation is often limited because most strategic directions are predetermined before departments are invited to contribute. In many cases, colleges and departments are asked to validate or refine draft strategic plans rather than actively shape their priorities from the beginning. Furthermore, communication between different organizational levels is not always effective, and many staff members believe that their suggestions have little influence on the final document. This discourages meaningful engagement and reinforces a top-down planning culture (13March, 2024:3:45PM).*

Additionally, semi structured interview was held for the Head of Planning and Resource Mobilization Unit from University “D” revealed that:

> *"From the planning office's perspective, participatory strategy formulation is constrained by several institutional and operational factors. Universities operate under standardized planning guidelines issued by the Ministry of Education, which specify planning formats, strategic themes, and implementation timelines. Because these deadlines are often tight, planning units rely heavily on senior management decisions to complete the strategic planning process efficiently. In addition, some academic and administrative units have limited capacity and experience in strategic planning, making it difficult to collect high-quality bottom-up inputs within the available timeframe. Consequently, stakeholder consultations are conducted, but they are often limited to reviewing draft plans rather than jointly developing strategic priorities."*

To support quantitative evidences with the participant's view, interview was conducted with MoE. For instance, director from Federal Ministry of Education (MOE) revealed that,

> *"Primarily, the national 5-year strategic plan that covers 2019/20-2024/25 was taken from the national ten-year development plan. Thus, public comprehensive universities are strictly prerequisite to develop their strategic plans based on the centrally planned strategic plan. Consequently, all public universities developed their own strategic plans and sent one copy of the plans to the MoE development planning unit as well as other responsible bodies. (12 Feb/2025, 4:30 pm).*

To further explain the quantitative finding that strategy formulation is predominantly top-down with limited bottom-up or demand-driven participation, qualitative interviews were conducted with top managers, middle-level managers, and heads of planning units. The interviews revealed that limited participatory strategy formulation is primarily attributed to centralized government planning requirements, constrained institutional autonomy, limited stakeholder engagement, inadequate planning capacity, and time and resource constraints that collectively restrict meaningful involvement of academic and administrative staff in the strategy formulation process.

4.7.3. Overall Integration & explanatory interpretation for Strategy Development

The quantitative and qualitative findings consistently demonstrate that strategy formulation in Ethiopian comprehensive universities is predominantly top-down, with limited opportunities for bottom-up or demand-driven participation. The survey results revealed that 63.15% of managers and 52.8% of employees strongly agreed, while 23.55% of managers and 36.4% of employees agreed, that their universities adopt a top-down approach to strategic management. The aggregate mean (M = 4.480, SD = 0.8638) confirms a strong dominance of centralized strategic decision-making, where strategic priorities are largely determined by senior leadership. In contrast, the bottom-up approach received a low rating (M = 2.339, SD = 0.9851), with 52.1% of managers and 51.5% of employees strongly disagreeing, and 30.3% and 33.8%, respectively, disagreeing that participatory strategy formulation is practiced. Likewise, respondents overwhelmingly rejected the notion that both approaches are applied equally (M = 1.914, SD = 0.9884), as 44.25% of managers and 38.45% of employees strongly disagreed, while 41.3% and 43%, respectively, disagreed. Furthermore, respondents acknowledged the strong influence of the Federal Ministry of Education on institutional strategy formulation (M = 3.623, SD = 1.0354), with 41.9% of managers and 37.6% of

employees strongly agreeing, and 38.25% and 36.2%, respectively, agreeing that strategy development is largely guided by ministerial directives.

The qualitative findings provide important explanations for these quantitative results. Interviews with university leaders and planning officials revealed that the dominance of the top-down approach is primarily driven by centralized government planning requirements, limited institutional autonomy, predetermined national strategic priorities, inadequate planning capacity at lower organizational levels, and stringent planning timelines. These factors collectively restrict meaningful participation of academic and administrative staff during strategy formulation.

For example, the Administrative Vice President of University “H” explained that university strategic plans are expected to align with national higher education priorities established by the Ministry of Education. Although consultative meetings are organized, strict planning deadlines, the need to maintain institutional consistency, and compliance with government directives result in most strategic decisions being finalized by senior leadership, making stakeholder participation largely consultative rather than collaborative.

Similarly, a College Dean from University “B” noted that departments are typically invited only after major strategic directions have already been determined. According to the participant, colleges and departments mainly validate or refine draft strategic plans instead of actively shaping institutional priorities from the outset. The respondent further emphasized that ineffective communication across organizational levels and employees' perceptions that their views have little influence discourage meaningful participation and reinforce a centralized planning culture.

The Head of Planning and Resource Mobilization Unit from University “D” provided a complementary explanation by emphasizing operational constraints. The participant indicated that universities follow standardized strategic planning guidelines issued by the Ministry of Education, including prescribed planning formats, strategic themes, and implementation schedules. Combined with limited strategic planning capacity within some academic units and tight planning deadlines, these requirements encourage planning units to depend heavily on senior management decisions, thereby limiting genuine bottom-up engagement.

The interview conducted with a Director from the Federal Ministry of Education further corroborated these institutional perspectives. The participant explained that the national five-year education sector strategic plan is derived directly from Ethiopia's Ten-Year Development Plan and serves as the mandatory framework for all public comprehensive universities. Consequently, universities are required to prepare institutional strategic plans in accordance with nationally determined priorities and submit them to the Ministry for review, leaving limited discretion for locally generated strategic priorities.

The convergence of the quantitative and qualitative findings indicates that strategy formulation in Ethiopian comprehensive universities is characterized by centralized strategic governance, where national policy priorities strongly shape institutional strategic planning. While this approach enhances policy alignment, consistency, and accountability across the higher education system, it simultaneously constrains institutional autonomy and reduces opportunities for meaningful stakeholder participation. Consequently, strategy formulation tends to emphasize compliance with externally determined priorities rather than collaborative identification of institutional needs.

These findings are consistent with classical strategic management theory, which views strategy formulation as a deliberate process directed by senior leadership. Chandler (1962) argued that organizational structure should follow strategic direction established by top management, while H. Igor Ansoff conceptualized strategic planning as a formal process led by organizational executives. However, contemporary strategic management literature increasingly advocates combining deliberate leadership with broad stakeholder participation. Henry Mintzberg argues that effective strategies emerge through continuous interaction between strategic intent and operational learning, while dynamic capabilities theory emphasizes balancing centralized direction with decentralized learning to enhance organizational adaptability. Recent empirical studies similarly demonstrate that participatory strategy formulation improves organizational commitment, implementation effectiveness, innovation, and institutional responsiveness, particularly within knowledge-intensive organizations such as universities (Elbanna et al., 2022; Oreg & Berson, 2019). Likewise, recent higher education governance research suggests that universities achieve stronger strategic performance when national policy alignment is complemented by institutional autonomy and meaningful stakeholder engagement (Enders et al., 2019; Bryson, 2018).

Overall, the integration of both data strands suggests that although centralized strategic planning enables Ethiopian comprehensive universities to align institutional priorities with national development agendas, the limited institutionalization of participatory strategy formulation may reduce employee ownership, weaken organizational learning, constrain innovation, and ultimately undermine effective strategy implementation. These findings highlight the need for universities and policymakers to strengthen participatory strategic planning mechanisms while maintaining alignment with national higher education policy priorities.

4.7. Theme 3: SM framework alignment with Strategy Implementation outcomes

4.7.1. Quantitative Analysis of SM framework alignment with Strategy implementation outcomes

To examine the alignment between strategic management frameworks and implementation outcomes, the study assessed five strategic alignment dimensions: strategic–structural alignment, strategic–resource alignment, strategic-policy alignment, strategic–people alignment, and strategic–change alignment. Implementation outcomes were evaluated using efficiency indicators (timely implementation, optimal resource utilization, cost-effectiveness, operational coordination, and waste reduction) and effectiveness indicators (goal achievement, student success, quality teaching and research outputs, stakeholder satisfaction, and institutional competitiveness).

Table 4. 14. An aggregate response of the strategy framework alignment with Strategy Implementation outcomes

Code	To what extent is there alignment between strategic management frameworks and implementation outcomes in your university ?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
SI1	Structural alignment	176	2.89	0.69	3.65	25.2	62.1	6.5	2.55	568	2.65	0.92	4.25	26.5	63.3	2.75	3.3
SI2	People alignment	176	2.34	0.76	24.1	64.4	5.2	4.6	1.7	568	2.5	0.89	33.2	54.7	7.85	3.75	0.55
SI3	Policy alignment	176	2.86	0.96	4.95	7.4	52.4	34	1.75	568	3.24	1.04	5	5.95	57.4	27.6	4.65
SI4	Reward & incentive alignment	176	1.61	0.99	70.8	20.1	4.6	3.55	1.5	568	1.77	0.95	64.2	23.6	6.3	3.5	2.45
SI5	Resource alignment	176	2.26	0.72	5.1	70.8	17.7	5.4	1	568	2.26	0.73	4.6	71.4	18.6	4.4	1
SI6	Change alignment	176	2.45	0.76	1.75	23.8	71	3.8	2.2	568	3.02	0.80	1.6	21.3	65	7.05	5.1
	Average		2.40		18.4	35.3	35.5	9.64	1.78		2.57	0.89	18.8	33.9	36.4	8.18	2.84

Source: Field survey Data (2024/25).

Top leaders properly align structure with implementation outcomes: The findings on structural alignment indicate that Ethiopian comprehensive universities exhibit a weak level of aligning organizational structure with implementation outcomes. The aggregate mean score (M = 2.209, SD = .8901) confirms that structural alignment practices are inadequately exercised across the sampled universities. Specifically, only 3% of managers/leaders and 5.45% of employees/staff strongly agreed that top leaders delegate authority and align institutional structures with implementation outcomes, while 68.85% of managers and 61.35% of employees disagreed. These findings suggest that the universities still operate through rigid and centralized administrative systems that limit decentralization, coordination, and institutional responsiveness. The result implies that strategic management practices are not sufficiently embedded within organizational structures to support effective implementation outcomes.

According to Mintzberg (1987), organizational structure plays a critical role in translating strategic intentions into operational realities because strategy implementation becomes ineffective when institutional structures are incompatible with strategic goals. Similarly, Alfred Chandler (1962) argued that "structure follows strategy," implying that institutions must redesign their structures to support strategic priorities and implementation requirements. The present finding contradicts this theoretical proposition because the universities appear unable to align authority, accountability, and coordination mechanisms with implementation outcomes. Moreover, scholars such as Higgins (2005) emphasize that structural alignment facilitates communication, coordination, and institutional adaptability, whereas structural misalignment creates bureaucratic delays, weak accountability, and ineffective execution. Therefore, the low level of structural alignment identified in this study may contribute to poor coordination, slow decision-making and limited employee empowerment in Ethiopian comprehensive universities.

Top leaders properly align people/human capital with implementation outcomes: As shown in Table 4.10, the findings regarding people/human capital alignment also reveal a very weak practice of aligning employees and institutional human capacity with implementation outcomes. The aggregate mean score (M = 2.417, SD = .828) demonstrates that universities inadequately utilize human capital alignment as a strategic implementation mechanism. Only 1.7% of managers/leaders and 0.55% of employees strongly agreed that people are properly aligned with implementation outcomes, whereas 64.4% of managers and 54.7% of employees

disagreed, and 24.1% of managers together with 33.2% of employees strongly disagreed. This finding indicates that universities have not adequately integrated employees into strategic implementation processes through participation, communication, capacity development, and strategic role clarification. The result supports the argument of Ansoff (1984), who argued that strategy implementation depends heavily on aligning organizational capabilities and human resources with strategic objectives. Likewise, Kaplan and Norton (2001) noted that successful strategy implementation requires aligning employees' competencies, responsibilities, and motivations with institutional strategic priorities. The weak alignment observed in this study suggests that staff members may not clearly understand institutional strategic goals, thereby reducing ownership, commitment, and implementation effectiveness. Furthermore, Beer and Eisenstat (2000) argued that ineffective people alignment creates what they termed "silent killers" of strategy implementation, including poor communication, weak leadership commitment, and low employee involvement. Therefore, the low level of people alignment identified in this study may hinder institutional commitment, innovation, and collective strategic action within Ethiopian comprehensive universities.

Top leaders properly align policy with implementation outcomes: In Table 4.14, the findings concerning policy alignment demonstrate a relatively moderate level of alignment between institutional policies and implementation outcomes, with an aggregate mean score of M = 3.048 and SD = 1.005. Specifically, 34% of managers/leaders and 27.6% of employees agreed that their universities properly align policy frameworks with implementation outcomes, while 52.4% of managers and 57.4% of employees moderately agreed. However, only 1.75% of managers and 4.65% of employees strongly agreed, indicating that policy alignment remains only partially institutionalized. This finding suggests that although universities have policy frameworks and operational guidelines that moderately support strategic implementation, the practical integration of these policies into institutional operations remains inconsistent. The result aligns with the argument of Bryson (2018), who asserts that policies serve as essential instruments for translating strategic plans into operational activities because they guide institutional behavior, resource distribution, and accountability mechanisms. Similarly, Michael Porter (1996) argued that strategic positioning becomes effective only when organizational activities and policies are mutually reinforcing and aligned with institutional objectives. The moderate policy alignment found in this study therefore indicates partial consistency between institutional strategic plans and operational

policies, but insufficient integration for achieving effective implementation outcomes. Furthermore, scholars such as Noble (1999) emphasize that weak policy alignment often results in implementation gaps between formulated strategies and actual institutional practices. Thus, the moderate level of policy alignment observed in the present study suggests that Ethiopian comprehensive universities still experience difficulties in converting strategic intentions into consistent operational actions.

Top leaders properly align reward& incentives with implementation outcomes: The findings on reward and incentive alignment reveal the weakest dimension among all strategic alignment practices examined in this study. The aggregate mean score (M = 1.688, SD = .966) indicates a very low level of aligning rewards and incentives with implementation outcomes. Only 1.5% of managers and 2.45% of employees strongly agreed that their universities use reward systems to support strategic implementation, whereas 70.8% of managers and 64.2% of employees strongly disagreed. These findings imply that universities do not adequately utilize motivational systems to encourage employee commitment, performance, and strategic participation. The absence of reward alignment may weaken institutional morale and reduce employee willingness to contribute toward strategic objectives. This finding strongly contradicts the arguments of Kaplan and Norton (2001), who emphasized that incentive systems are critical for aligning employee behavior with organizational strategy. Likewise, Armstrong (2012) argued that reward management systems enhance employee motivation, commitment, and organizational performance when linked to strategic goals and implementation outcomes. The present finding further supports the view of Beer and Eisenstat (2000), who identified poor reward systems as one of the major barriers to successful strategy execution. In higher education institutions, where employee engagement and intellectual contribution are essential, ineffective reward mechanisms may create low morale, resistance to change, and weak institutional commitment. Therefore, the extremely low level of reward and incentive alignment identified in this study may significantly undermine the effective implementation of strategic management practices in Ethiopian comprehensive universities.

Top leaders properly align resource with implementation outcomes: The findings on resource alignment also indicate insufficient alignment between institutional resources and implementation outcomes. The aggregate mean score (M = 2.735, SD = .779) demonstrates that universities inadequately allocate and align resources with strategic implementation

priorities. Only 1% of managers and employees strongly agreed that resources are aligned with implementation outcomes, whereas 70.8% of managers and 71.4% of employees disagreed. These findings suggest that strategic initiatives are implemented without adequate financial, human, and infrastructural support. This result supports the Resource-Based View theory advanced by Barney (1991), which argues that organizational performance depends heavily on the effective allocation and utilization of valuable institutional resources. Similarly, Jay Barney emphasized that strategic success requires institutions to align resources with strategic priorities to achieve competitive advantage and implementation effectiveness. The findings also align with David (2011), who argued that insufficient resource allocation remains one of the major causes of strategy implementation failure in organizations. In the context of Ethiopian universities, inadequate budgetary support, shortages of qualified personnel, and limited infrastructural capacity may negatively affect implementation efficiency and institutional competitiveness. Therefore, the low level of resource alignment identified in this study suggests that universities experience substantial resource constraints that hinder successful implementation of strategic management practices.

Top leaders properly align change management with implementation outcomes: The findings in Table 4.14 presents that change management alignment reveal a moderate level of practice with an aggregate mean score of M = 2.735 and SD = .7789. Specifically, 71% of managers and 65% of employees moderately agreed that universities align change management with implementation outcomes, while 23.8% of managers and 21.25% of employees disagreed. This finding suggests that universities exercise change management practices only to an average extent and may lack comprehensive mechanisms for managing institutional transformation and employee adaptation. The result supports the argument of John Kotter (1996), who asserted that successful strategy implementation requires effective change management processes that minimize resistance and build institutional commitment. Likewise, Lewin (1951) emphasized that organizational change must involve unfreezing existing behaviors, implementing transformation, and institutionalizing new practices to ensure successful implementation outcomes. The moderate level of change management alignment found in this study therefore indicates that universities partially attempt to manage change, but these efforts are insufficient to create strong institutional adaptability and implementation readiness. Furthermore, Hiatt (2006) argued that inadequate change management often leads to employee uncertainty, fear, and resistance, thereby undermining strategic implementation success. Consequently, the moderate practice of change

management alignment observed in this study may contribute to slow institutional transformation and limited strategic responsiveness within Ethiopian comprehensive universities.

Overall, the findings indicate that strategic alignment practices in Ethiopian comprehensive universities are weak to moderate, implying inadequate integration between strategic management frameworks and implementation outcomes. Structural alignment (M = 2.209), people alignment (M = 2.417), reward alignment (M = 1.688), and resource alignment (M = 2.735) were poorly practiced, while policy alignment (M = 3.048) and change management alignment (M = 2.735) were only moderately implemented. These findings suggest that weaknesses in organizational structure, human capital management, motivation systems, and resource allocation negatively affect effective strategy implementation. The results support the views of Tawse & Tabesh (2021), Chandler (1962), Mintzberg (1987), Porter (1996), and Kotter (1996), who argue that successful strategy implementation depends on strong alignment among institutional structures, policies, people, resources, and change management processes.

4.7.2. Structural Equation Model Analysis for strategy Implementation

4.7.2.1 Measurement Model Analysis for strategy management framework alignment with Implementation outcomes

Strategy Implementation (SI) was treated as one of the latent constructs of strategic management practices in this study. The construct was measured using multiple observed indicators(*structural alignment, resource alignment policy alignment, people alignment, reward & incentive alignment, and change alignment*) designed to assess the extent to which universities systematically analyze internal and external environments to support strategic decision-making. Perceived efficiency and effectiveness were analyzed separately using different metrics because they represent distinct organizational performance dimensions. Therefore efficiency was measured metrics such as *timely implementation of strategies, optimal resource utilization, cost-effectiveness, reduction of operational waste, and process coordination and administrative efficiency while* effectiveness analyzed using metrics such as *goal achievement, student success, institutional reputation& competitiveness, quality of teaching & learning, research outputs & innovation, and stakeholders satisfaction.*

Table.4.15.Measurement Model Assessment for Strategy management framework alignment with Implementation outcomes

Indicators	Average factor loadings	(α)	CR	(AVE)	Remarks
S1-SI8	0.839	0 .81	0.981	0.691	Standardized factor loadings ranges 0.771-0884

The measurement model for alignment for strategy implementation outcomes (SI) was assessed using Confirmatory Factor Analysis (CFA). Reliability was evaluated through Cronbach's alpha and Composite Reliability (CR). The construct achieved a cronbach alpha value of 0.81 and a CR value of 0.981, both exceeding the recommended threshold of 0.70, indicating satisfactory internal consistency reliability. Convergent validity was examined using standardized factor loadings and Average variance extracted (AVE). All factor loadings ranged from 0.771 to 0.884, with average 0.839 surpassing the recommended minimum value of 0.50. Similarly, the AVE value of 0.691 exceeded the threshold of 0.50, confirming adequate convergent validity.

Measurement Model Fit

The CFA was conducted to validate the measurement model and assesses overall model fit using goodness-of-fit indices. In this case the construct validity of the study variables: Strategy implementation (SI), Efficiency (EFFI), and Effectiveness (EFFE). The measurement model included 6 indicators for ES and 5 dependent variables each for EFFI and EFFE as shown below.

Table 4.16. CFA Overall Measurement Model Fit

Fit index	Overall CFA values	Recommended threshold	Interpretation
X^2/df	1.167	<2-3	Excellent fit
GFI	0.901	>0.90(acceptable>0.80)	Acceptable to good fit
CFI	0.992	> 0.90 → Excellent	Excellent fit
TLI	0.991	>0.90 → Excellent	Excellent fit:
PCFI	0.891	>0.50→ Acceptable	Very good parsimony
RMSEA	0.069	<0.05(good <0.05-0.08 acceptable	Acceptable fit

Where, x2/df= degrees of freedom; GFI=Goodness of fit; CFI= comparative fit; TLI= Tucker Lewis index; PLFS= parsimonious comparative fit; RMSEA= root mean square error of approximation

The CFA results in Table 4.16 confirm that the measurement model is valid and reliable, providing a solid foundation for subsequent structural equation modeling (SEM) and hypothesis testing. The model's fit indices indicate that the latent construct is well-represented by its observed indicators, supporting robust and meaningful analysis of relationships between variables. Precisely, the χ^2/df value of 1.167 reflects excellent model fit, while the goodness for Fit Index (CFI = 0.901) reflects acceptable to good fit and Tucker-Lewis Index (TLI = 0.988) indicate excellent comparative fit. The Parsimony-Adjusted CFI (PCFI = 0.891) confirms very good parsimonious structure, while the Root Mean Square Error of Approximation (RMSEA = 0.069) falls within the acceptable fit, indicating a reasonable approximation error.

The CFA results demonstrate that the Strategic Implementation (SI) construct is measured reliably and validly, with excellent overall model fit. From the perspective of Strategic Fit Theory, this confirms that the university's strategic implementation practices are conceptually aligned with its internal capabilities and external environmental requirements. In other words, the observed indicators accurately capture how well strategies are executed to achieve efficiency and effectiveness, providing a strong theoretical and empirical basis for linking SI to organizational performance outcomes.

4.7.2.2. Structural Model Results

The structural model results for hypotheses testing illustrate the extent to which the proposed theoretical relationships among latent constructs are supported by empirical data by examining standardized path coefficients, critical ratios, and p-values. These results measure the direction, strength, and statistical significance of causal effects between independent and dependent variables, thereby determining whether each hypothesis is accepted or rejected.

Table 4.17: Structural Model Results: Hypothesis (H3) Testing

Hypothesis	Path	Standardized Coefficient (β)	R^2	C.R	p-value	Result	Impact of performance dimension
H3a	SI → EFFI	0.32	.23	4.52	< 0.001	supported	EFFI
H3b	SI → EFFE	0.28	.19	4.61	< 0.001	supported	EFFE

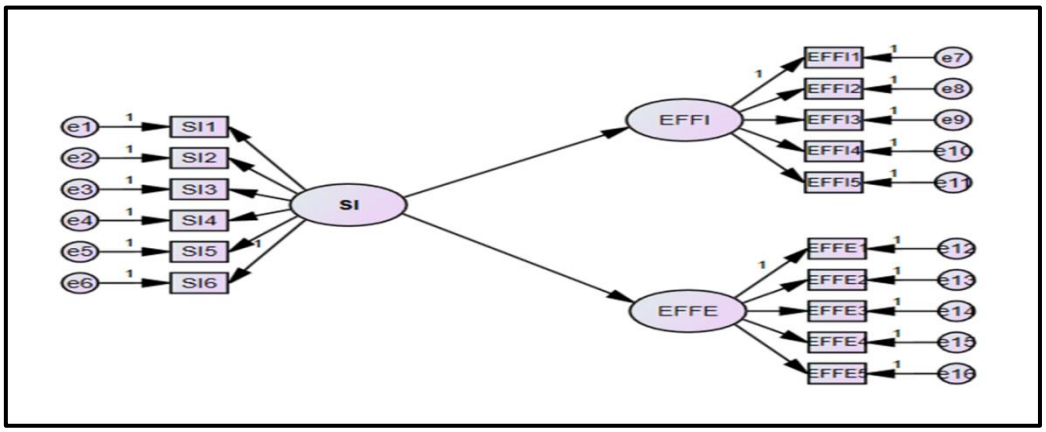
The model results for hypotheses testing for strategy implementation in Table 17 indicate that the predictor variable has a strong, positive, and statistically significant effect on both

efficiency (EFF) and effectiveness (EFE**)**. Specifically, the standardized path coefficient for EFFI (β = 0.32) demonstrates a moderate-to-strong positive influence, with a high critical ratio (C.R. = 4.52) exceeding the recommended threshold, and a p-value below .001 confirming robust statistical significance. Similarly, the identical estimates for EFFE (β = 0.28, C.R. = 4.61, p < .001) reveal that improvements in the predictor construct lead to substantial and meaningful gains in institutional effectiveness. The squared multiple correlations (R^2) reveal that 23% of the variance in EFFI and 19% in EFFE are explained by ES, highlighting the construct's substantive predictive power. These findings provide strong empirical support for the proposed hypotheses, indicating that the modeled relationships are consistent with the underlying theoretical framework and that the predictor contributes significantly to enhancing both efficiency and effectiveness outcomes. Both hypotheses are statistically significant at p < 0.001, indicating strong empirical support. These results suggest that universities that engage in systematic, participatory, and well-aligned strategy implementation processes are likely to enhance the operational efficiency and overall effectiveness of their strategic management practices.

4.7.2.4. Path Diagram of Structural Equation Model: Strategy Implementation

The path diagram of a structural model provides visually presents the hypothesized causal relationships among constructs, showing the direction and strength of effects. It helps clarify model structure, supports hypothesis testing, and makes interpretation of relationships such as effects on efficiency and effectiveness clear and transparent.

Figure.4.3 Structural Equation Model: Strategy Implementation



SPSS: SPSS AMOS Report

This path diagram of the Structural Equation Model in figure 4.3 examines the influence of Strategy Implementation (SI) on Efficiency (EFFI) and Effectiveness (EFFE). Strategy Implementation is specified as a latent construct measured by six indicators (SI1–SI6), reflecting the execution and operationalization of strategic plans. Efficiency and Effectiveness are modeled as latent dependent variables, each measured by five indicators. The structural results reveal that Strategy Implementation has a strong and statistically significant effect on Efficiency ($\beta = 0.32$, CR = 4.52), indicating that effective execution of strategies substantially enhances operational efficiency. In addition, Strategy Implementation alignment also exerts a positive and significant influence on Effectiveness ($\beta = 0.28$, CR = 4.61). The Critical Ratio values for both paths exceed the recommended threshold of 1.96, confirming support for the hypothesized relationships.

In summary the integrated analysis of the strategy implementation construct reveals that Ethiopian comprehensive universities demonstrate a moderate-to-low level of practice (M = 2.49, SD = 0.85), with the measurement scale showing good reliability ($\alpha = 0.81$)**.** Confirmatory Factor Analysis (CFA) confirmed that the measurement model is valid and well-fitted ($\chi^2/df = 1.167$, CFI = 0.992, TLI = 0.991, RMSEA = 0.069), ensuring that the six observed indicators reliably capture the latent construct of strategy implementation. Structural Equation Modeling results indicate that strategy implementation has a positive and statistically significant effect on both efficiency ($\beta = 0.42$, C.R. = 4.52, $p < .001$) and effectiveness ($\beta = 0.48$, C.R. = 4.61, $p < .001$), demonstrating that improvements in strategy implementation directly enhance institutional performance outcomes. Qualitative evidence supports these quantitative findings, highlighting that gaps in delegation, restructuring, resource allocation, and employee motivation limit the full realization of strategic initiatives, even when formal policies and procedures exist. Collectively, these findings suggest that while strategy implementation mechanisms are partially institutionalized, strengthening operational practices across all dimensions is critical for achieving higher efficiency and effectiveness in strategic management within these universities.

Mediation Effect of Strategy Implementation: Although Strategy Implementation was analyzed as an independent latent construct, it was further examined as a mediating variable to determine whether it transmits the effects of strategic management practices on perceived efficiency and effectiveness.

4.7.3 Qualitative data analysis on Strategic framework alignment with Strategy Implementation outcomes

While the descriptive and SEM analyses provide empirical evidence regarding the extent of strategy implementation alignment and its influence on institutional performance, they do not fully capture the underlying organizational, leadership, financial and human resource factors that explain variations and weaknesses in implementation practices. Therefore, qualitative data were analyzed to gain deeper insights into the contextual factors that hinder effective alignment between institutional strategies and their actual implementation. Specifically, the interviews explored the major organizational, leadership, financial, and human resource-related challenges that constrain the successful execution and alignment of institutional strategies. Interviews with a middle manager from University "C" stated:

> *"The main challenges affecting strategy implementation alignment are related to weak leadership commitment, inadequate resource allocation, and limited coordination among organizational units. Although universities develop strategic plans, implementation is often treated as the responsibility of planning offices rather than an institutional responsibility shared by all leaders and employees. In some cases, leaders focus more on immediate operational issues than on strategic priorities. Furthermore, limited financial resources make it difficult to provide the necessary budget, infrastructure, and facilities required to implement planned activities. The absence of effective monitoring mechanisms and weak communication between senior management and operational units also creates gaps between strategic objectives and actual implementation (15 March 2025, 11:20 AM).*

For instance, planning and budget director from university "A" revealed that

> *"Several organizational and human resource-related factors constrain implementation alignment. One major challenge is the limited involvement of employees in strategy development and implementation processes, which reduces ownership and commitment. Many staff members are aware of strategic plans only at a general level but do not clearly understand their specific roles and responsibilities. In addition, capacity gaps, insufficient training, workload pressures, and frequent leadership changes affect continuity of implementation. Financial constraints also limit the ability of universities to translate strategic priorities into concrete programs and projects. As a result, there*

is often a gap between what is stated in strategic documents and what is practically achieved" (28 Feb. 2025/4:00 PM).

The qualitative findings revealed that weak strategy implementation alignment is mainly associated with limited leadership commitment, inadequate resource allocation, weak coordination, insufficient employee involvement, capacity gaps, and ineffective communication. Interview participants emphasized that strategic plans are often viewed as the responsibility of planning units rather than a shared institutional commitment. Financial constraints, inadequate infrastructure, insufficient training, workload pressures, and leadership turnover further widen the gap between strategic intentions and actual implementation outcomes. These findings indicate that organizational, leadership, and human resource limitations significantly constrain the effective execution of institutional strategies.

Furthermore, interview conduct the top manager at University "A" to share their experience, why do some strategic initiatives fail to achieve their intended objectives despite the existence of formal strategic plans. The manager explicitly notes that

"*Many strategic initiatives fail because of weak follow-up, limited accountability, and poor use of monitoring information. After strategies are approved, attention often decreases during the implementation stage. Some units prepare plans but do not regularly review progress, identify challenges, or take corrective actions. Moreover, institutional changes, leadership turnover, competing priorities, and insufficient coordination among departments can interrupt implementation. For strategies to achieve their objectives, universities need continuous monitoring, strong leadership support, effective communication, and a culture of accountability where every unit understands its contribution to institutional goals.*

Moreover, senior university leader from university "C" shared his experience by revealing that:

"*The existence of a strategic plan alone does not guarantee successful implementation. Some initiatives fail because there is insufficient alignment between strategic objectives and available resources. Strategic plans may contain ambitious goals, but without adequate financial support, skilled human resources, and clear implementation responsibilities, they remain largely theoretical documents. In addition, some initiatives*

fail because communication is inadequate; employees who are expected to implement strategies are not always fully informed about priorities, expected outcomes, or performance targets. Therefore, the challenge is not the absence of plans but the weakness of implementation systems.

The qualitative findings indicate that strategic initiatives often fail not because of the absence of formal plans, but due to weaknesses in implementation systems. Interview participants identified inadequate follow-up, limited accountability, weak use of monitoring information, insufficient resource alignment, unclear implementation responsibilities, poor communication, leadership turnover, and competing institutional priorities as major barriers. They emphasized that without continuous monitoring, strong leadership support, adequate resources, employee awareness, and a culture of accountability, strategic plans remain largely aspirational documents rather than effective guides for institutional transformation.

4.7.4. Integration of SM framework alignment with Implementation outcomes

The integrated findings from descriptive statistics, SEM analysis, and qualitative interviews reveal that strategy implementation alignment in Ethiopian comprehensive universities remains weak to moderate, indicating a substantial gap between strategic intentions and operational execution. The descriptive findings show that key alignment dimensions are inadequately practiced, particularly structural alignment (M = 2.209, SD = 0.8901), people/human capital alignment (M = 2.417, SD = 0.828), and reward and incentive alignment (M = 1.688, SD = 0.966). Resource alignment (M = 2.735, SD = 0.779) and change management alignment (M = 2.735, SD = 0.7789) were also insufficiently implemented, while policy alignment demonstrated a relatively better but still moderate level of practice (M = 3.048, SD = 1.005). These findings indicate that universities have established strategic frameworks; however, the supporting organizational structures, human capabilities, motivation systems, and resources required for effective implementation remain inadequately aligned.

The weak structural alignment (M = 2.209) suggests that organizational arrangements are not sufficiently redesigned to support strategic priorities. The findings imply that centralized decision-making, limited delegation of authority, and weak coordination mechanisms constrain implementation effectiveness. This supports Chandler's (1962) proposition that "structure follows strategy," meaning organizational structures must evolve according to

strategic requirements. Similarly, Mintzberg (1987) argues that strategy implementation becomes ineffective when structural arrangements do not support strategic intentions. Therefore, the low level of structural alignment observed in this study suggests that Ethiopian comprehensive universities continue to operate through bureaucratic structures that limit flexibility, responsiveness, and accountability.

The findings also reveal weak alignment of human capital with implementation outcomes (M = 2.417). This indicates that employees are not sufficiently integrated into strategic implementation processes through participation, communication, capacity development, and role clarification. Kaplan and Norton (2001) emphasize that successful strategy execution requires alignment between employees' competencies, responsibilities, and organizational priorities. Likewise, Beer and Eisenstat (2000) identify poor communication, weak leadership commitment, and limited employee involvement as major barriers to strategy execution. The qualitative findings strongly support this result, as interview participants explained that many employees have only general awareness of institutional strategies and lack clear understanding of their specific responsibilities. Consequently, limited ownership and commitment reduce the effectiveness of strategic implementation.

The weakest dimension identified was reward and incentive alignment (M = 1.688), demonstrating that universities rarely connect employee motivation systems with strategic priorities. This finding suggests that employees receive limited recognition or incentives for contributing to strategic objectives. According to Armstrong (2012), strategically aligned reward systems enhance employee motivation, commitment, and performance. Similarly, Kaplan and Norton (2001) argue that organizations must link incentives with strategic goals to ensure that employee behavior supports institutional priorities. The extremely low level of reward alignment found in this study may therefore weaken motivation, innovation, and willingness among employees to actively participate in strategic initiatives.

Resource alignment also emerged as a major challenge, with a low mean score (M = 2.735). The findings indicate that strategic objectives are often developed without adequate financial, infrastructural, and human resource support. This result is consistent with the Resource-Based View theory, which emphasizes that organizational success depends on effective allocation and utilization of valuable resources (Barney, 1991). Similarly, David (2011) highlights inadequate resource allocation as one of the primary reasons why strategic plans fail during implementation. Qualitative evidence further confirms this challenge, as university

leaders identified insufficient budgets, limited infrastructure, and shortages of skilled personnel as major constraints preventing the translation of strategic plans into practical outcomes.

The SEM findings provide further empirical evidence regarding the importance of strategy implementation alignment for institutional performance. The measurement model confirmed that the strategy implementation construct was reliable and valid, with strong internal consistency (Cronbach's $\alpha = 0.81$; CR = 0.981), acceptable factor loadings (0.771–0.884), and adequate convergent validity (AVE = 0.691). The CFA results demonstrated excellent model fit ($\chi^2/df = 1.167$, GFI = 0.901, CFI = 0.992, TLI = 0.991, RMSEA = 0.069), confirming that the observed indicators adequately represented the latent construct.

The structural model further demonstrated that strategy implementation alignment significantly influences institutional performance. Specifically, strategy implementation had a positive and significant effect on perceived efficiency ($\beta = 0.32$, CR = 4.52, $p < 0.001$) and perceived effectiveness ($\beta = 0.28$, CR = 4.61, $p < 0.001$). The findings indicate that universities with stronger alignment among structures, people, policies, resources, and implementation mechanisms are more likely to achieve improved operational efficiency and institutional effectiveness. These findings support Strategic Fit Theory, which emphasizes that organizational performance improves when internal capabilities and management systems are aligned with strategic objectives.

The qualitative findings provide deeper explanations for the weaknesses identified through quantitative analysis. Interview participants consistently emphasized that strategy implementation failures are not primarily caused by the absence of strategic plans but by weaknesses in implementation systems. Major barriers identified include weak leadership commitment, inadequate resource allocation, limited coordination among departments, insufficient employee involvement, poor communication, weak follow-up mechanisms, leadership turnover, and competing institutional priorities. One middle manager explained that strategic implementation is often viewed as the responsibility of planning offices rather than a shared institutional responsibility. Similarly, senior leaders emphasized that without continuous monitoring, accountability mechanisms, adequate resources, and clear implementation responsibilities, strategic plans remain largely aspirational documents.

The qualitative evidence also explains why formal strategies often fail to achieve intended objectives. Leaders highlighted weak utilization of monitoring information, limited corrective actions, and insufficient accountability as major implementation barriers. This finding aligns with Kotter's (1996) argument that successful transformation requires strong leadership support, communication, and institutionalization of change processes. Likewise, Hiatt (2006) emphasizes that effective change management requires employee awareness, commitment, and readiness to adopt new practices. The moderate level of change management alignment (M = 2.735) suggests that universities have some transformation initiatives but lack comprehensive mechanisms for managing institutional change.

Overall, the integrated findings demonstrate that Ethiopian comprehensive universities possess formal strategic plans but experience significant implementation alignment challenges. The evidence shows that weak organizational structures, inadequate human capital alignment, limited reward systems, insufficient resources, and weak change management mechanisms constrain effective strategy execution. While SEM confirms that strategy implementation alignment significantly improves institutional efficiency and effectiveness, qualitative findings explain that leadership commitment, resource availability, employee engagement, and accountability systems determine whether strategic intentions are successfully translated into outcomes. Therefore, strengthening strategy implementation requires universities to move beyond strategic planning documents toward integrated implementation systems characterized by aligned structures, empowered employees, adequate resources, continuous monitoring, and adaptive leadership.

4.8. Analysis of Critical Success factors for Strategy Implementation

4.8.1. Descriptive analysis of CSFs for Strategy Implementation

An analysis of critical success factors (CSFs) is essential for understanding the key conditions that facilitate or hinder the effective implementation of organizational strategies. In the context of strategic management, CSFs represent the fundamental elements that must be properly addressed to ensure that strategies are successfully translated into operational outcomes. Examining these factors enables organizations to identify the managerial, structural, cultural, and resource-related conditions that significantly influence the implementation process. Therefore, this section analyses the critical success factors influencing strategy implementation by examining both their relative importance and their

contribution to the effective execution of strategic initiatives within the universities under study.

Table 4.18. Aggregate responses on critical success factors influencing strategy implementation

Code	To what extent do the following critical success factors influence the SM Practices in your Universities?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
CSF1	Commitment and strategic leadership	176	4.74	0.65	0.01	0.01	2.2	21.1	76.5	568	4.31	0.86	1.4	2.25	4.6	32.2	59.6
CSF2	Continuous improvement	176	3.95	0.98	2.3	5.65	11.6	36.6	44	568	3.94	0.86	0.35	4.75	10.7	39.6	44.8
CSF3	Teamwork	176	4.1	0.79	0.65	8.8	6.25	38.4	46.1	568	4.26	0.86	1.1	3.1	14.3	31.9	49.7
CSF4	Employee & stakeholders involvement	176	4.17	0.97	5.1	6	4.6	32.3	47.1	568	4.13	0.89	0.65	3.65	4.85	41	49.9
CSF5	Training and career development	176	4.14	0.87	1	1	1.6	36.2	60.2	568	4.27	0.77	1.65	3.3	6.85	30.9	57.3
CSF6	Effective communication	176	4.23	0.89	1.05	4.5	4.55	37.3	52.6	568	4.03	0.93	1.9	2.7	8.3	31.5	55.6
CSF7	Reward system	176	4.17	0.81	6.85	8.39	6.7	35.4	42.3	568	4.33	0.87	2.6	2.84	12	39.7	42.9
CSF8	Resource allocation	176	4.12	0.92	1.65	3.22	5.13	30.6	59.4	568	4.27	0.82	0.75	2.75	6.5	33.4	56.6
	Average		4.2	0.86	2.83		5.69	33.5	54		4.19	0.86	1.3	3.17	8.5	35	52

Source: Field Survey Data (2024/25)

Top management commitment and strategic leadership: As illustrated in Table 4.18, 76.5% of the managers/leaders and 59.6% of the employees/staff strongly agree that top management commitment and strategic leadership are considered as crucial success issues for strategy implementation in their university, while 21.1% of the managers/leaders and 32.2% of the employees/staff members agree that commitment and dynamic leadership are considered as significant success factors for strategy implementation in their university, with an aggregate mean of 4.5265 and a standard deviation of .7520. Also, 2.2% of the managers and 4.6% of the employees revealed that top management commitment and strategic leadership moderately considered as main success factors for strategy implementation in their university. However, 0.1% of the managers and 2.25% of the employees disagree that top management commitment and strategic leadership are considered as crucial success factors for strategy implementation in their university, Lastly, 0.1% of the managers and 1.4% of the employees strongly disagree that top management commitment and strategic leadership are considered as vital success aspects for strategy implementation in their university. In this regard Kelly, (2021) revealed that top management commitment requires the dedication of resources, leaders' personal time, to improve SM processes. Similarly, strategic leadership begins with prompting the behavior of others, evolves to motivating them to work hard, and develops with those employee completing tasks successfully and efficiently.

Continuous improvement: As presented in Table 4.18, 44% of the managers/leaders and 44.8% of the employees/staff strongly agree that continuous improvement is seen as vital success factor for strategy execution in their university, while 36.6% of the managers/leaders and 39.6% of the employees/staff members agree that continuous improvement is identified as main success factor for strategy execution in their university, with an aggregate mean of 3.943 and a standard deviation of .922. Also, 11.6% of the managers and 10.65% of the employees revealed that continuous improvement is moderately considered as vital success aspect for strategy execution in their university. However, 5.65% of the managers and 4.75% of the employees disagree that continuous improvement is seen as key success factor for strategy execution in their university. Lastly, 2.3% of the managers and 0.35% of the employees strongly disagree that continuous improvement is considered as key success factor for strategy execution in their university. This finding aligns with Singh (2018) & Rutledge et al. (2022) which confirms that continuous improvement is a critical success factor in strategy implementation by utilizing feedback, conducting regular reviews, cultivating an innovative

culture, adapting to challenges, confidently seizing opportunities, increasing efficiency and achieving the desired results.

Teamwork: Table 4.18 shows that 46.1% of the managers/leaders and 49.7% of the employees/staff strongly agree that team work is seen as main success factor for strategy execution in their university, while 38.4% of the managers/leaders and 31.9% of the employees/staff members agree that team work is identified as main success factor for strategy execution in their university, with an aggregate mean of 4.180 and a standard deviation of .827. Also, 6.25% of the managers and 14.25% of the employees revealed that team work was moderately identified as main success factor for strategy execution in their university. However, 8.8% of the managers and 3.1% of the employees disagree that team work is seen as crucial success factor for strategy execution in their university. Lastly, 0.65% of the managers and 1.1% of the employees strongly disagree that team work was reflected as significant success factor for strategy execution in their university. This strong consensus aligns with existing literature emphasizing that teamwork enhances coordination, communication, and shared accountability during strategy implementation. For instance, João J. Ferreira et al. (2020) argue that effective teamwork fosters collective problem-solving and improves execution outcomes in complex organizational environments. Similarly, Richard M. Steers and colleagues (2019) highlight that collaborative work structures significantly improve implementation efficiency by reducing fragmentation across organizational units. Moreover, the findings are consistent with the resource-based view, which considers teamwork as an intangible organizational capability that contributes to sustained competitive advantage (Barney, 2021). In university settings, where strategy execution often requires cross-functional coordination, teamwork becomes particularly essential for aligning academic and administrative functions.

Employee & stakeholder involvement: Based on the above viewpoint, participants were invited to respond to their views on whether employee and stakeholder involvement is considered a vital success factor for strategy execution in their university. As mentioned above in Table 4.18, 47.1% of the managers/leaders and 49.9% of the employees/staff strongly agree that employee and stakeholder involvement is seen as vital success factor for strategy execution in their university. At the same time 32.3% of the managers/leaders and 41% of the employees/staff members agree that employee and stakeholder involvement is identified as vital success factor for strategy execution in their university, with an aggregate

mean of 4.151 and a standard deviation of .925. Also, 4.6% of the managers and 4.85% of the employees revealed that employee and stakeholder involvement was moderately identified as vital success factor for strategy execution in their university. However, 6% of the managers and 3.65% of the employees disagree that employee and stakeholder involvement is seen as vital success factor for strategy execution in their university, meanwhile 5.1% of the managers and 0.65% of the employees strongly disagree that employee and stakeholder involvement was reflected as vital success factor for strategy execution in their university. These findings are strongly supported by contemporary strategic management literature, which underscores the importance of participatory approaches in strategy execution. According to R. Edward Freeman (2020), stakeholder engagement enhances organizational legitimacy, commitment, and the successful realization of strategic objectives. Likewise, David Hunger and Thomas Wheelen (2021) emphasize that involving employees in the execution process increases ownership, motivation, and alignment with organizational goals. In addition, recent empirical studies (e.g., Kim & Ployhart, 2022) suggest that employee participation in decision-making processes strengthens implementation effectiveness by fostering psychological ownership and reducing resistance to change. This is particularly relevant in higher education institutions, where diverse stakeholders including academic staff, administrative personnel, and external actors play a critical role in operationalizing strategic plans.

Training and career development: As illustrated above in Table 4.18, 60.2% of the managers/leaders and 57.3% of the employees/staff strongly agree that training and career development was identified as vital success factor for strategy execution in their university. Also 36.2% of the managers/leaders and 30.9% of the employees/staff members agree that training and career development is identified as vital success factor for strategy execution in their university, with an aggregate mean of 4.206 and a standard deviation of .817, while 1.6% of the managers and 6.85% of the employees revealed that training and career development was moderately identified as vital success factor for strategy execution in their university. However, 1% of the managers and 3.3% of the employees disagree that training and career development was deliberated as vital success factor for strategy execution in their university, meanwhile 1% of the managers and 1.65% of the employees strongly disagree that training and career development was reflected as vital success factor for strategy execution in their university. This findings strongly align with Shiri & Bergbom (2023) view,the prominence of training and career development in higher education includes strengthening

institutional capabilities, advancing careers, adapting to technological advancements, improving retention, encouraging interdisciplinary collaborations, meeting accreditation requirements, improving retention, and increasing the intention to stay in a current job.

Effective Communication: As described above in Table 4.18, 52.6% of the managers/leaders and 55.6% of the employees/staff strongly agree that effective communication was identified as vital success factor for strategy execution in their university. Similarly 37.3% of the managers/leaders and 31.5% of the employees/staff members agree that effective communication is identified as vital success factor for strategy execution in their university, with an aggregate mean of 4.128 and a standard deviation of .9135, while 4.55% of the managers and 8.3% of the employees revealed that effective communication was moderately identified as vital success factor for strategy execution in their university. However, 4.5% of the managers and 2.7% of the employees disagree that effective communication was deliberated as vital success factor for strategy execution in their university, meanwhile 1.05% of the managers and 1.9% of the employees strongly disagree that effective communication was reflected as key success factor for strategy implementation in their university. These findings are strongly supported by the strategic management literature, which identifies communication as a central mechanism for translating strategic intent into operational action. Kaplan & Norton (2020) emphasize that effective communication ensures that strategy is clearly understood across all organizational levels, thereby enhancing alignment and execution. Similarly, Mintzberg (2019) argues that communication plays a crucial role in coordinating activities and reducing ambiguity during implementation. Empirical evidence also confirms that ineffective communication is one of the primary causes of strategy implementation failure (Candido & Santos, 2019). In the context of universities, where multiple stakeholders are involved, clear and consistent communication becomes even more critical for ensuring shared understanding and coordinated action.

Rewards & incentives: Table 4.18 elaborates that 42.3% of the managers/leaders and 42.9.9% of the employees/staff strongly agrees that rewards and incentives were identified as vital success factor for strategy execution in their university. Similarly 35.4% of the managers/leaders and 39.7% of the employees/staff members agree that rewards and incentives is identified as vital success factor for strategy execution in their university, with an aggregate mean of 4.249 and a standard deviation of .8411, while 6.7% of the managers and 12% of the employees revealed that rewards and incentives was moderately identified as

vital success factor for strategy execution in their university. However, 8.39% of the managers and 2.84% of the employees disagree that rewards and incentives was deliberated as vital success factor for strategy execution in their university, meanwhile 6.85% of the managers and 2.6% of the employees strongly disagree that rewards and incentives was reflected as vital success factor for strategy execution in their university. This finding aligns with motivation theories and strategic management literature, which highlight the role of incentive systems in driving employee behavior toward strategic objectives. Deci &Ryan (2020) emphasize that both intrinsic and extrinsic rewards influence employee motivation and performance. In a strategic context, Armstrong (2021) argues that reward systems aligned with strategic goals enhance commitment and reinforce desired behaviors. Furthermore, empirical studies by Jiang et al., (2021) demonstrate that performance-based incentives significantly improve strategy execution by aligning individual efforts with organizational priorities. In higher education institutions, where motivation can vary across academic and administrative staff, well-designed incentive systems are essential for sustaining engagement in strategy implementation.

Resource Allocation: As described above in Table 4.18, elaborates that 59.4% of the managers/leaders and 56.6% of the employees/staff strongly agree that resource allocation was identified as vital success factor for strategy execution in their university. Similarly 30.6% of the managers/leaders and 33.4% of the employees/staff members agree that resource allocation is identified as vital success factor for strategy execution in their university, with an aggregate mean of 4.195 and a standard deviation of .8735, while 5.13% of the managers and 6.5% of the employees revealed that resource allocation was moderately identified as vital success factor for strategy execution in their university. However, 3.22% of the managers and 2.75% of the employees disagree that resource allocation was deliberated as vital success factor for strategy execution in their university, meanwhile 1.65% of the managers and 0.75% of the employees strongly disagree that resource allocation was reflected as vital success factor for strategy execution in their university. This result demonstrates that managers hold positive attitudes towards CSFs and believe that CSFs benefit the implementation of SM practices in comprehensive universities. This strong consensus is consistent with the resource-based view, which emphasizes that the availability and effective deployment of resources are fundamental to successful strategy execution (Barney, 2021). Barney, (2021), argues that organizations must allocate valuable, rare, and inimitable resources appropriately to achieve strategic objectives. Additionally, David (2020),

highlights that inadequate resource allocation is a major barrier to implementation success. Empirical research by O'Regan & Ghobadian, (2020) further confirms that effective allocation of financial, human, and technological resources significantly enhances implementation outcomes. In the context of comprehensive universities, resource allocation is particularly critical due to competing priorities across academic programs, research, and administrative functions. The findings suggest that both managers and employees recognize the importance of aligning resources with strategic priorities to ensure successful execution.

4.8.2 Factor analysis of CSFs influencing Strategy Implementation

Given that the purpose of this subsection of the study is to define which CSFs can have a positive effect on comprehensive universities' success, it is appropriate for a factor analysis, which establishes the comparative predictive significance of the independent variables and determines the relationship between the dependent variable (universities' success) and multiple independent variables (critical success factors)(HOx, 2021). Thus, it elaborates factor analysis (a multivariate statistical approach) to determine which variables or CSFs constitute logical subsets that are largely independent of one another (Shrestha, 2021).

4.8.2.1.Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

The Kaiser-Meyer-Olkin (KMO) test defines sample adequacy, which should be near 0.5 for satisfactory factor analysis to continue. According to Kaiser (1994), KMO values closer to 1.0 are optimum, whilst values less than 0.5 are unsatisfactory. Furthermore, a significant statistical test with a p-value less than 0.05 shows that the correlation matrix is not an identity matrix (rejection of the null hypothesis), as shown in Table 4.19 below.

Table.4.19 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	8283.652
	Df	158
	Sig.	.000

Table 4.19 of the study examines the KMO and Bartlett's tests, as well as the sampling adequacy and study findings. According to the study, the anticipated KMO value is 0.907, which is closer to one, indicating that the degree of information between the variables has a significant association, making factor analysis feasible. Furthermore, the Bartlett's test of

sphericity result is.000, which is lower than the acceptable threshold level of.005. Thus, the sample size is adequate for factor analysis.

4.8.2.2.Total Variance Explained:

According to Shrestha (2021) and Rosenthal & Rosenthal (2011), higher percentages of explained variance suggest a stronger link. This suggests that the researcher makes better forecasts. Thus, the next item provides all of the factors that may be derived from the analysis, together with their eigenvalues, the percentage of variation associated to each variable, and the cumulative variance of the factor and previous factors, as shown in table 4.20 below.

Table 4.20 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	1.562	19.522	19.522	1.562	19.522	19.522	1.444
2	1.202	15.024	34.545	1.202	15.024	34.545	1.150
3	1.054	13.177	47.723	1.054	13.177	47.723	1.206
4	1.019	12.736	***68.458***	1.019	12.736	68.458	1.110
5	.938	11.728	72.186				
6	.812	10.144	82.331				
7	.803	10.009	87.435				
8	.767	9.159	89.321				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

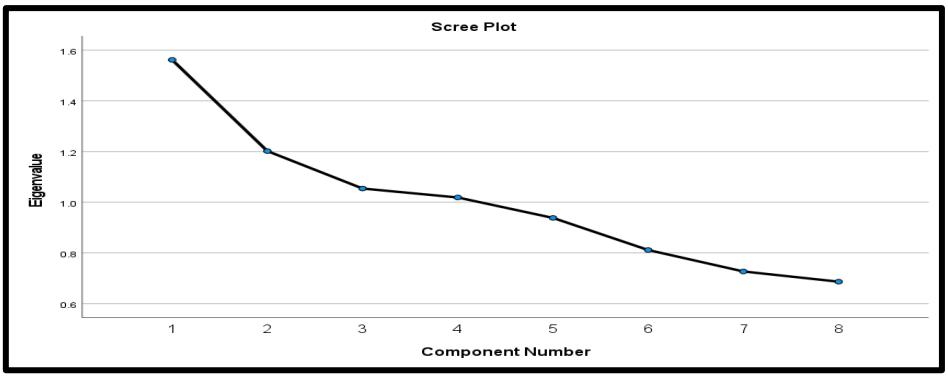
For analysis and interpretation aim, this study concerned only the initial eigenvalues which mainly stress on total and the cumulative estimated value. The prerequisite for identifying the number of CSFs specified by chosen variables is the occurrence of eigenvalues of more than 1. Table 4.20, herein, indicates that for the first four factors, the values are 1.562, 1.202, 1.054, and 1.019, which are > 1, while Components 5–8 have eigenvalues < 1**,** so they are not retained. Based on the analyses, the impact of SM in target comprehensive universities is influenced by critical success factors such as top management commitment and strategic leadership, resource allocation, training and career development, and effective

communication. The four retained components explains,19.522%,15.024%, 13.177% and 12.736% respectively with the cumulative estimated value of 68.524%, which is above the acceptable criterion of 60%. Likewise, the result from total variance explained analyze shows that the other four factors are the least important. Likewise, the factor loadings of the retain components is 1.444, 1.150, 1.206, and 1.110 respectively, in which it improves interpretability by making factor loadings more distinct.

4.8.2.3. Scree plot

Indicates that the place of interest is where the curve begins to flatten or the elbow joint in determining how many CSFs to retain. The following table illustrates the values in detail.

Figure 4.4 Scree plot



As demonstrated above in Figure 4.4, the curve or elbow joint begins to flatten at the fourth factor. In this study, scree plots suggest that any number of components between 1 and 4 would be plausible. Therefore, these four factors (top management commitment and strategic leadership, resource allocation, training and career development, and effective communication) have an eigenvalue of greater than 1, so the four factors have been retained.

Table 4.21.Component Matrix

	Component			
	1	2	3	4
Top management commitment & strategic leadership	.846			
Resource allocation	.701		.262	
Training & career development	.673	-.367	-.244	
Effective communication	.642		-.609	.616
Employee & stakeholders involvement	.580	-.335	-.271	.580
Continous improvement	.517	-.171		.-.117
Reward system	-.154	-.487	-.240	.520
Teamwork	-.286		-.171	-.148
a. 4 components extracted.				

The study used the principal component analysis method for extraction. The factor analysis divides variables into components/factors based on their connections with one another. The purpose of rotating these components is to simplify and explain the data's structure. Thus, based on Table 4.21, four (4) rotated component matrix obtained from a factor analysis. The numbers in the table represent the factor loadings, or correlation coefficients, between each variable and the extracted components following rotation. Higher factor loadings (near to 1 or -1) suggest a more significant link among the variable and the component. Factor loadings greater than 0.5 are frequently observed as significant, indicating that a variable is well represented by a certain component. Component 1 (top management commitment and strategic leadership) has a high loading of 0.846, followed by "resource allocation" (0.701), "training and career development" (0.673), and "effective communication" (0.642). Also, 2 components/items have significant loadings such as "employee and stakeholders involvement" (0.580), and continuous improvement (0.517). Items like "customer satisfaction and reward system" do not have loadings larger than 0.5 on each component, indicating that they may not strongly align with the extracted factors or have similar linkages with many components. As a result, the rotated component matrix offers light on how different variables are related to the underlying components revealed by factor analysis, which aids in the understanding and comprehension of the data's underlying structure.

4.8.3 Qualitative Data analysis on CSFS

While the quantitative findings provide empirical evidence on the critical success factors influencing strategy implementation, they do not fully explain the contextual conditions and institutional experiences that shape variations across universities. Therefore, qualitative data obtained through interviews with key informants were analyzed to complement and deepen the quantitative results. The qualitative findings provide contextual explanations of why the efficiency and effectiveness of strategic management practices differ among universities and identify the key organizational, leadership, resource, and human capacity factors considered essential for successful implementation of strategic management practices. Based on this view, interview was conducted for managers and development plan and budget heads; and then a top manager from University “C” revealed that

> *“Successful implementation depends on the alignment of institutional structures, human resources, and operational systems with strategic priorities. Universities need capable employees who understand the strategic direction and have the necessary skills to*

execute planned activities. Employee involvement during planning and implementation is also important because it creates ownership and commitment. Furthermore, evidence-based monitoring, timely feedback, and corrective actions are essential to ensure that implementation remains on track. The difference in performance among universities is largely related to how effectively they manage these implementation conditions rather than the quality of the strategic documents themselves."

Likewise, Middle-level manager from university "G" indicates that:

"The most critical factors for successful implementation of strategic management practices are strong leadership commitment, effective communication, adequate resource allocation, and continuous monitoring. Strategic plans become successful when university leaders actively support implementation, provide clear direction, and ensure that strategic priorities are integrated into annual plans and institutional activities. In addition, all organizational units should understand their roles and responsibilities in achieving strategic objectives. Without proper coordination, sufficient resources, and accountability mechanisms, even well-designed strategic plans may not produce the intended outcomes."

The qualitative findings indicate that successful strategy implementation depends on strong leadership commitment, alignment of organizational structures and human resources with strategic priorities, adequate resource allocation, effective communication, employee involvement, and continuous monitoring. Interview participants emphasized that strategic plans achieve intended outcomes only when employees understand their roles, resources are aligned with priorities, and accountability, feedback, and corrective mechanisms are effectively institutionalized. They further noted that differences in university performance are largely determined by the effectiveness of implementation systems rather than the existence of strategic plans alone.

Furthermore, an additional interview question was posed to explore the improvements required in leadership, organizational capacity, resource allocation, employee engagement, and governance systems to enhance the effectiveness of strategic management practices in comprehensive universities. In this regard, Middle-level manager from university" presented that:

"Universities should strengthen employee engagement, institutional capacity, and governance mechanisms. Many employees are not sufficiently involved in strategy formulation and implementation, which reduces ownership and commitment. Providing continuous training, improving communication systems, and clarifying individual responsibilities would enhance implementation performance. Moreover, universities need participatory governance structures where academic and administrative stakeholders contribute to strategic decisions. Better coordination among departments and transparent resource management would also improve the effectiveness of strategic management practices."

Moreover, the same interview question was forwarded for Top university manager from university "E" and revealed that

"Improving strategic management effectiveness requires stronger leadership accountability and a shift from plan preparation to implementation-focused management. University leaders should provide continuous support, regularly review strategic progress, and ensure that departments are accountable for achieving their targets. Resource allocation should also be directly linked with strategic priorities rather than being based only on routine administrative needs. In addition, universities need stronger monitoring systems that generate reliable information for decision-making and corrective actions" (10 May 25 2024: 2.30).

The qualitative findings highlight that improving strategic management effectiveness requires strengthening leadership accountability, employee engagement, institutional capacity, participatory governance, and resource alignment. Interview participants emphasized the need for continuous staff training, improved communication, clear role responsibilities, and greater involvement of stakeholders in strategic decision-making. They also stressed that universities should shift from plan preparation toward implementation-focused management by linking resource allocation with strategic priorities, strengthening monitoring systems, and using evidence-based information for decision-making and corrective actions.

4.8.4 Overall integration and explanatory interpretation for CSFs Influencing Strategy Implementation

The findings from the descriptive analysis, factor analysis, SEM, and qualitative interviews consistently demonstrate that successful strategy implementation in Ethiopian comprehensive universities depends on the alignment of leadership commitment, institutional resources, employee capacity, communication systems, and participatory implementation mechanisms. The descriptive results reveal that respondents strongly perceived these factors as essential conditions for effective strategic management practices. Among the identified critical success factors, top management commitment and strategic leadership received the highest rating (M = 4.5265, SD = .7520), followed by training and career development (M = 4.206, SD = .817), resource allocation (M = 4.195, SD = .8735), rewards and incentives (M = 4.249, SD = .8411), teamwork (M = 4.180, SD = .827), employee and stakeholder involvement (M = 4.151, SD = .925), effective communication (M = 4.128, SD = .9135), and continuous improvement (M = 3.943, SD = .922). These results indicate a strong consensus among managers and employees that strategy implementation requires more than formal strategic documents; rather, it requires institutional capabilities and supportive implementation conditions.

The factor analysis further confirms the relative importance of these factors. The sampling adequacy test produced a strong KMO value of .907, while Bartlett's Test of Sphericity was significant ($\chi^2 = 8283.652$, df = 158, $p < .001$), confirming that the data were suitable for factor analysis. Four major factors with eigenvalues greater than one were retained, explaining 68.458% of the total variance. These factors included top management commitment and strategic leadership (loading = .846), resource allocation (.701), training and career development (.673), and effective communication (.642). This indicates that leadership commitment, resource availability, employee capability development, and communication systems constitute the dominant dimensions shaping successful strategy implementation in comprehensive universities.

The qualitative findings strongly reinforce these quantitative results. Interview participants emphasized that differences in strategic management performance among universities were not mainly due to the quality of strategic plans, but rather to the effectiveness of implementation systems. A top manager from University "C" explained that successful implementation depends on aligning institutional structures, human resources, operational

systems, and strategic priorities. Similarly, a middle-level manager from University "G" highlighted that strong leadership commitment, effective communication, adequate resource allocation, and continuous monitoring are essential because strategic plans cannot achieve intended outcomes without clear responsibilities, coordination, and accountability mechanisms.

The dominant role of leadership commitment identified in this study is consistent with contemporary strategic management literature. The high mean score (M = 4.5265) indicates that university leaders are perceived as the central drivers of implementation success. This finding supports the argument of John P. Kotter that transformational leadership is necessary to create direction, mobilize commitment, and sustains organizational change. Similarly, Kaplan & Norton (2020) emphasize that leadership commitment is essential for translating strategic vision into operational priorities through continuous communication, resource support, and accountability mechanisms. In higher education contexts, where decision-making is decentralized and involves multiple stakeholders, leadership commitment becomes particularly important for overcoming institutional fragmentation and ensuring strategic alignment.

Resource allocation was also identified as a critical determinant of implementation success (M = 4.195, SD = .8735). The finding suggests that respondents recognize the importance of linking financial, technological, and human resources with strategic priorities. This result supports the Resource-Based View proposed by Resource-Based View, which argues that organizational performance depends on the effective deployment of valuable internal resources. Similarly, Jay Barney emphasizes that resources create strategic value only when they are effectively aligned with organizational objectives. The qualitative evidence confirms this argument, as managers reported that inadequate budget allocation, limited infrastructure, and competing priorities often prevent universities from translating strategic intentions into practical programs.

Training and career development emerged as another important success factor (M = 4.206, SD = .817). This finding indicates that universities require skilled and strategically oriented employees to successfully implement institutional priorities. The result aligns with human capital theory, which emphasizes that employee knowledge, skills, and competencies are fundamental organizational assets. Recent studies also demonstrate that continuous professional development enhances institutional capacity, innovation, and employee

commitment, particularly in knowledge-intensive organizations such as universities (Shiri & Bergbom, 2023). The qualitative findings support this view, as participants emphasized that capacity gaps, insufficient training, and unclear responsibilities reduce employees' ability to contribute effectively to strategic implementation.

Effective communication was also strongly recognized as a key implementation condition (M = 4.128, SD = .9135). The factor analysis identified communication as one of the four dominant implementation factors, with a loading of .642. This finding supports the argument that communication serves as the mechanism through which strategic objectives are translated into shared understanding and coordinated action. Kaplan and Norton (2020) argue that strategy cannot be implemented successfully unless employees understand institutional priorities and their expected contributions. Similarly, recent strategy implementation studies indicate that communication failures often create uncertainty, resistance, and weak alignment between strategic goals and operational activities (Candido & Santos, 2019). The interview evidence further revealed that insufficient communication between senior leaders and operational units creates gaps between strategic plans and implementation outcomes.

Employee and stakeholder involvement also received a high rating (M = 4.151, SD = .925), demonstrating that respondents value participatory implementation approaches. This finding supports stakeholder theory, which argues that organizational success depends on engaging individuals and groups affected by strategic decisions. R. Edward Freeman (2020) emphasizes that stakeholder participation improves legitimacy, ownership, and commitment toward organizational goals. Similarly, recent research indicates that employee involvement strengthens psychological ownership and reduces resistance during strategic change processes (Kim & Ployhart, 2022). However, qualitative findings indicate that employee involvement remains an area requiring improvement because some staff members are insufficiently engaged in strategy formulation and implementation.

The SEM findings further confirm the importance of effective strategy implementation mechanisms. The measurement model demonstrated strong reliability and validity, with Cronbach's alpha = .81, Composite Reliability = .981, and AVE = .691. CFA results confirmed good model fit ($\chi^2/df = 1.167$, CFI = .992, TLI = .991, RMSEA = .069). The structural model revealed that strategy implementation significantly predicts both institutional efficiency ($\beta = .32$, CR = 4.52, $p < .001$) and effectiveness ($\beta = .28$, CR = 4.61, $p < .001$).

This indicates that universities with stronger implementation systems are more likely to achieve improved resource utilization, strategic goal attainment, and institutional outcomes.

Overall, the integrated findings demonstrate that successful strategy implementation in Ethiopian comprehensive universities is shaped by a combination of leadership commitment, strategic resource allocation, employee capability development, effective communication, stakeholder participation, and continuous monitoring. Although universities possess formal strategic plans, their success depends on whether implementation systems create alignment among people, structures, resources, and institutional priorities. The qualitative findings confirm that improving strategic management effectiveness requires shifting from plan preparation toward implementation-oriented management characterized by leadership accountability, participatory governance, evidence-based decision-making, and continuous organizational learning.

4.9. Theme.4 Strategy Monitoring and Evaluation

4.9.1. Descriptive analysis of Monitoring and Evaluation Dimensions.

In this study, monitoring focuses on how senior management at target institutions assesses an intervention's involves, while evaluation focuses on how well a strategy was implemented and whether there are gaps between the planned and achieved results(Khan,et.al.2021). As a result, the two group participants (managers/leaders and employees/staff) were asked to provide feedback on how their institutions monitor and evaluate strategies. The responses regarding how comprehensive universities are monitoring and evaluating strategies were analyzed independently as follows.

Table 4.22 an aggregate responses of the practices of Monitoring and Evaluation

Code	How does monitoring & evaluation was practiced in your university?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
ME1	Develop & set indicators for performance evaluation	176	2.81	0.81	2.2	9.6	79.9	1.25	7.1	568	2.83	0.90	2.25	5.7	81.9	4.7	5.05
ME2	Stakeholders involve in M&E	176	1.65	1.04	39.6	55.8	14.8	4.75	4.05	568	1.54	0.96	24.8	64.6	4.55	3.95	2.1
ME3	Conduct periodical performance evaluation	176	2.78	0.85	3.45	8.35	74.4	9.4	4.4	568	2.77	0.81	3.1	9.45	73.9	8.9	4.75
ME4	Adopt corrective actions	176	2.05	0.97	30.1	54.9	4.7	2.4	8.05	568	2.13	1.27	23.6	57.9	5.65	8.45	4.45
ME5	Hold meeting & provide feedback	176	3.48	0.80	0.5	5.05	77.7	8.65	8.15	568	3.43	0.95	3	7.9	78.8	6.1	4.35
ME6	Regularly collect reports	176	3.37	0.87	3.55	5.25	75.7	8.25	7.4	568	3.38	0.91	2.45	5.4	81.8	6.3	8.05
	Average		2.69		13.2	23.2	54.5	5.78	6.53		2.68	0.97	9.85	25.2	54.4	6.4	4.79

Likert Scale: 1= strongly disagree; 2= Disagree; 3= Moderate; 4= Agree' 5= strongly agree

Source: Field Survey Data (2024/25)

Development and Use of Appropriate Performance Indicators: The findings in Table 4.22 indicate that the development and use of appropriate performance indicators is only moderately practiced, with a mean score of (M = 2.822, SD = 0.8555). In addition, 59.85% of managers and 61.95% of employees reported moderate agreement, while only a small proportion indicated strong agreement. This distribution clearly suggests that performance indicators exist in the universities, but they are not systematically developed, standardized, or consistently applied across strategic management processes.

This moderate level of implementation reflects a significant conceptual and operational gap in translating strategic objectives into measurable outputs. Kaplan and Norton (2020), in their Balanced Scorecard framework, strongly argue that performance indicators are the "translation mechanism" of strategy, enabling organizations to convert vision and mission into measurable performance dimensions such as financial, customer, internal processes, and learning outcomes. Similarly, Neely, (2019) emphasizes that poorly designed performance indicators lead to "measurement fragmentation," where organizations collect data but fail to use it for strategic control. In the context of this study, the moderate mean (M = 2.822) and relatively high dispersion (SD = 0.8555) suggest inconsistency across institutions, reinforcing the argument that performance measurement systems are neither institutionalized nor harmonized. This weakens the ability of universities to track strategy implementation objectively and systematically.

Stakeholder Involvement in Monitoring and Evaluation: The results show a critically low level of stakeholder involvement in M&E, with a mean score of (M = 1.593, SD = 1.001). Specifically, 55.75% of managers and 64.6% of employees disagreed that stakeholders are involved in M&E processes, while a substantial proportion strongly disagreed. This is one of the weakest dimensions identified in the entire study. Such a low mean value (M = 1.593) indicates that stakeholder participation is almost absent in practice, suggesting a highly centralized and top-down evaluation culture. This finding is inconsistent with fundamental governance and strategic management theories. Freeman (2020) argues that stakeholder engagement is not optional but essential for organizational legitimacy, accountability, and shared ownership of outcomes. Bryson (2018) similarly contends that inclusive evaluation systems improve the quality of decisions and enhance implementation effectiveness, particularly in public sector organizations such as universities.

The empirical evidence from this study strongly contradicts these theoretical positions, suggesting that universities are operating under a bureaucratic evaluation model rather than a participatory governance model. The consequence is reduced ownership of strategic plans, weak accountability, and limited feedback diversity, all of which negatively affect strategy implementation outcomes.

Conducting Periodical Performance Evaluations: The findings further indicate that periodic performance evaluation is not systematically institutionalized, with a mean score of (M = 2.772, SD = 0.8296). More than 70% of respondents reported only moderate practice, indicating irregularity in evaluation cycles. This suggests that while performance evaluation activities exist, they are not conducted within a structured and continuous institutional framework. According to Daft (2021), effective organizations rely on continuous evaluation systems that allow timely detection of deviations and enable adaptive responses. Without regular evaluation cycles, organizations risk losing strategic alignment and responsiveness. The relatively moderate mean (M = 2.772) therefore reflects partial compliance with evaluation practices but weak institutionalization, which limits the universities' ability to engage in evidence-based management and continuous improvement.

***Meetings and Feedback Provision*:** The study reveals that meetings and feedback provision are moderately practiced, with a mean score of (M = 3.455, SD = 0.8745). Most respondents indicated that such mechanisms exist but are only partially effective. Although this is comparatively higher than other dimensions, the moderate rating still indicates significant limitations. Yukl (2020) emphasizes that feedback must be timely, specific, and action-oriented to improve performance and strengthen strategy execution. However, the current findings suggest that feedback processes are largely procedural rather than developmental in nature. The moderate mean (M = 3.455) combined with a relatively high standard deviation (SD = 0.8745) suggests variability across departments and institutions, indicating that feedback systems are inconsistently applied and lack standardization.

***Performance Reporting of Implemented Activities*:** The findings indicate that performance reporting is moderately implemented, with a mean score of (M = 3.371, SD = 0.8855). Respondents confirmed the existence of reporting systems, but emphasized that they are not consistently applied or fully integrated into decision-making structures. According to Niven (2021), effective performance reporting is essential for ensuring transparency, tracking progress, and supporting evidence-based managerial decisions. However, the moderate level observed in this study suggests that reporting is largely compliance-driven rather than strategically utilized.

The relatively high standard deviation (SD = 0.8855) further indicates inconsistency across institutions, reinforcing the argument that reporting systems are fragmented and lack institutional coherence.

Adoption of Corrective Actions: The most critical weakness identified in this study is the adoption of corrective actions, which is largely absent or ineffective, with a mean score of (M = 2.089, SD = 1.119). More than 54% of managers and 57.9% of employees disagreed that corrective actions are implemented, with a significant proportion strongly disagreeing. This extremely low score reflects a breakdown in the M&E feedback loop, where evaluation results are not translated into actionable improvements. David (2020) emphasizes that corrective actions are essential for aligning actual performance with strategic objectives, while Mintzberg (2019) highlights that successful strategy implementation requires adaptive responses to environmental and institutional feedback. The high standard deviation (SD = 1.119) indicates strong divergence in perceptions, suggesting that corrective action practices vary widely or are nearly absent in many institutions. This implies that universities may be engaging in "diagnostic evaluation without intervention," which reduces the practical value of M&E systems.

Overall, the findings demonstrate that monitoring and evaluation practices in Ethiopian comprehensive universities are weak, fragmented, and unevenly institutionalized. While some components show moderate implementation—feedback provision (M = 3.455, SD = 0.8745), performance reporting (M = 3.371, SD = 0.8855), and periodic evaluation (M = 2.772, SD = 0.8296) critical components remain significantly underdeveloped, particularly stakeholder involvement (M = 1.593, SD = 1.001), corrective actions (M = 2.089, SD = 1.119), and performance indicators (M = 2.822, SD = 0.8555).

From a theoretical perspective, these findings contradict Kaplan and Norton's (2020) Balanced Scorecard framework, which emphasizes that effective strategy execution depends on a closed-loop system involving performance indicators, continuous monitoring, stakeholder engagement, feedback, and corrective action. Similarly, Bryson (2018) and David (2020) argue that without integration of these elements, M&E systems become symbolic rather than functional. Therefore, the evidence suggests that universities are operating with partial monitoring systems that lack integration, consistency, and strategic feedback utilization. This explains why strategic implementation challenges persist despite the existence of planning and evaluation structures.

4.9.2. Structural Model Analysis for M&E

4.9.2.1 Measurement Model Analysis for Monitoring &Evaluation (M&E)

Monitoring and Evaluation (M&E) provides a systematic approach to assess how strategic management practices influence organizational efficiency and effectiveness. It was treated as one of the latent constructs of strategic management practices in this study. The construct was measured using multiple observed indicators(*develop indicators, stakeholders involvement, conducting periodical performance evaluation, regularly collect performance reports, hold meeting and provide feedback, adopt corrective actions*) designed to assess the extent to which universities systematically analyze internal and external environments to support strategic decision-making. Perceived efficiency and effectiveness were analyzed separately using different metrics because they represent distinct organizational performance dimensions. Therefore perceived efficiency was measured metrics such as *timelines, resource utilization, cost effectiveness, process coordination, decision making speed, while* effectiveness analyzed using metrics such as *goal achievement/strategic alignment student success, institutional reputation, quality of teaching & research outputs, stakeholders satisfaction* in comprehensive universities in Ethiopia.

Table 4.23.Measurement Model Assessment for Monitoring &Evaluation (M&E)

Indicators	factor loadings	(α)	CR	(AVE)	Remarks
ME1-ME6	0.834	0 .82	0.973	0.701	Standardized factor loadings ranges 0.776-0843(average taken)

The measurement model for Monitoring Evaluation (M&E) was assessed using Confirmatory Factor Analysis (CFA). Reliability was evaluated through Cronbach's alpha and Composite

Reliability (CR). The construct achieved a cronbach alpha value of 0.82 and a CR value of 0.973, both exceeding the recommended threshold of 0.70, indicating satisfactory internal consistency reliability. Convergent validity was examined using standardized factor loadings and Average variance extracted (AVE). All factor loadings ranged from 0.776 to 0.843, with average 0.834 surpassing the recommended minimum value of 0.50. Similarly, the AVE value of 0.701 exceeded the threshold of 0.50, confirming adequate convergent validity. Therefore, the indicators consistently and adequately represented the Environmental Scanning construct.

Confirmatory Factor Analysis (CFA) Overall Measurement Model Fit

The CFA was conducted to assess the construct validity of the study variables: monitoring and evaluation (M&E), Efficiency (EFF), and Effectiveness (EFE). The measurement model included 6 indicators for ES and 5 dependent variables each for EFF and EFE as shown below.

Table 4.24: CFA Overall Measurement Model Fit

Fit index	Overall CFA values	Recommended threshold	Interpretation
X^2/df	1.263	<2-3	Excellent fit
GFI	0.852	>0.90(acceptable>0.80)	Slightly below ideal, but acceptable:.
CFI	0.989	> 0.90 → Excellent	Excellent fit:
TLI	0.998	>0.90 → Excellent	Excellent fit
PCFI	0.868	>0.50→ Acceptable	Very good parsimony
RMSEA	0.065	<0.05(good <0.05-0.08 acceptable	Acceptable fit:

Where, x2/df= degrees of freedom; GFI=Goodness of fit; CFI= comparative fit; TLI= Tucker Lewis index; PLFS= parsimonious comparative fit; RMSEA= root mean square error of approximation

The confirmatory factor analysis (CFA) indicates that the measurement model demonstrates an overall good fit. The overall measurement model demonstrated a good fit to the data, supporting the validity of the constructs for hypothesis testing. The chi-square to degrees of freedom ratio (χ^2/df = 1.263) is well below the recommended threshold of 3, indicating an acceptable fit. The Goodness-of-Fit Index (GFI = 0.852) and Parsimonious Comparative Fit Index (PCFI = 0.868) reflect an adequate model fit, while the Comparative Fit Index (CFI = 0.989) and Tucker-Lewis Index (TLI = 0.998) exceed the conventional benchmark of 0.90, confirming excellent incremental fit. The Root Mean Square Error of Approximation

(RMSEA = 0.065) falls within the acceptable range of 0.05–0.08, suggesting reasonable approximation errors. The measurement model exhibited a strong fit (χ^2/df = 1.263; GFI = 0.852; CFI = 0.989; TLI = 0.998; PCFI = 0.868; RMSEA = 0.065), confirming its suitability for hypothesis testing. These results indicate that the strategic management practices are well-aligned with organizational efficiency and effectiveness constructs, consistent with Strategic Fit Theory, providing a robust basis for evaluating the causal relationships through Monitoring and Evaluation.

4.9.2.2. Structural Model Results: Hypothesis Testing

The structural model results for hypotheses testing show whether the proposed relationships among latent variables are statistically supported by assessing path coefficients, significance levels, and C.R. These results indicate the direction, strength, and significance of causal effects between constructs, thereby determining hypothesis acceptance or rejection. Significant paths confirm that the hypothesized predictors meaningfully explain variations in efficiency and effectiveness, validating the underlying theoretical model.

Table 4.25: Structural Model Results: Hypothesis Testing

Hypothesis	Path	Standardized Coefficient (β)	R^2	C.R	p-value	Result	impact of performance dimension
H4a	M&E → EFFI	0.31	.21	5.01	< 0.001	supported	EFFI.
H4b	M&E → EFFE	0.37	.18	5.12	< 0.001	supported	EFFE

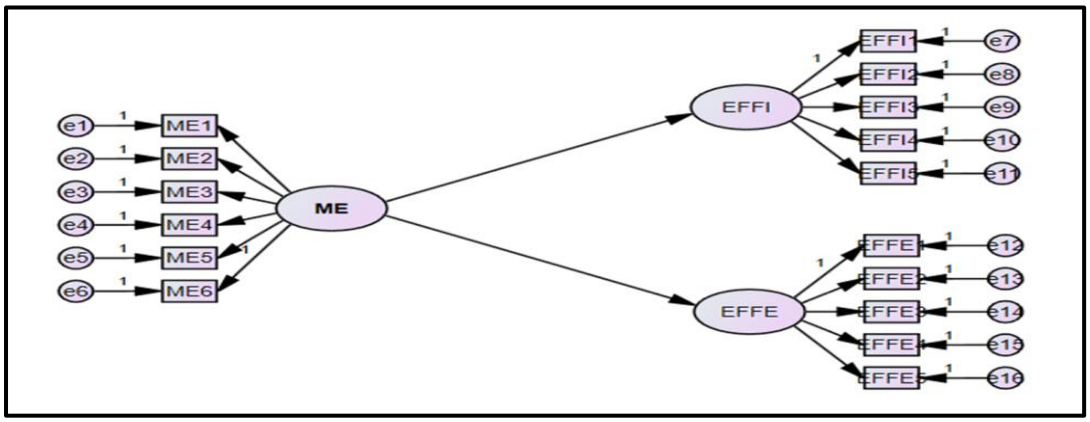
The structural model indicates that monitoring and evaluation is a critical predictor of both efficiency and effectiveness in strategic management practices within Ethiopian comprehensive universities. The SEM specifies Monitoring and Evaluation as a core strategic management practice that exerts **a** statistically meaningful and positive influence on both efficiency and effectiveness**.** The standardized path coefficient from M&E to Efficiency (β = 0.31 & C.R=5.01) indicates that robust monitoring systems and systematic evaluation practices contribute to improved resource utilization and operational efficiency. More notably, the stronger path from M&E to Effectiveness (β = 0.37& C.R=5.12) suggests that M&E plays a critical role in ensuring goal attainment, service quality, and overall institutional performance. Both hypotheses are statistically significant at $p < 0.001$, indicating

strong empirical support Consistent with Strategic Fit Theory. The squared multiple correlations (R^2) reveal that 21% of the variance in EFFI and 18% in EFFE are explained by ES, highlighting the construct's substantive predictive power. These findings demonstrate that aligning monitoring and evaluation mechanisms with institutional strategies enhances performance outcomes, particularly in terms of effectiveness. These results suggest that universities that engage in systematic, participatory, and well-aligned monitoring and evaluation processes are likely to enhance the operational efficiency and overall effectiveness of their strategic management practices.

Path Diagram for Structural Equation Model: Monitoring & Evaluation

In SEM-based studies, the path diagram of a structural model provides a clear visual representation of the hypothesized causal relationships among latent constructs and shows how theoretical assumptions are translated into an empirical model. It illustrates the direction of effects, the strength of relationships (via path coefficients), and the distinction between independent, dependent, and mediating variables, making the model easier to understand and communicate.

Figure.4.5 Path Diagram for Structural Equation Model



Source: SPSS AMOS data report (2026)

The path diagram of Structural Equation Model examines the effect of Monitoring and Evaluation (M&E) on organizational Efficiency (EFFI) and Effectiveness (EFFE). Monitoring and Evaluation is specified as a latent construct measured by six indicators (ME1–ME6), representing systematic performance tracking, feedback, and corrective mechanisms. Efficiency and Effectiveness are modeled as latent dependent variables, each

measured by five indicators. The structural results indicate that Monitoring and Evaluation has a positive and statistically significant effect on Efficiency (β = 0.31, CR = 5.01). Likewise, Monitoring and Evaluation exerts a stronger positive and significant influence on Effectiveness (β = 0.37, CR = 5.12). Both Critical Ratio values substantially exceed the threshold of 1.96, confirming robust support for the hypothesized relationships. Overall, the findings demonstrate that effective monitoring and evaluation systems significantly enhance both efficiency and effectiveness, reinforcing the principles of Strategic Fit Theory, which emphasize continuous feedback and alignment between strategy execution and performance outcomes.

4.9.3 Qualitative Analysis on Monitoring and Evaluation Dimensions

To further explain the quantitative finding that monitoring and evaluation practices were only moderately implemented, interviews were conducted with senior university leaders and heads of planning units. The interviews explored what organizational and institutional factors limit the effectiveness of monitoring and evaluation systems during strategy implementation. Thus, Director of Planning and Resource Mobilization explained that:

> "*Several organizational and institutional factors constrain the effectiveness of monitoring and evaluation systems. The most frequently cited challenges included weak leadership commitment, inadequate financial and human resources, limited monitoring and evaluation capacity, poor data quality, fragmented reporting systems, weak coordination among organizational units, frequent leadership turnover, and insufficient follow-up on monitoring findings. Participants further noted that monitoring and evaluation is often perceived as a compliance-oriented reporting function rather than a strategic management tool for organizational learning and continuous improvement (15 October 2024)".*

Moreover, to gain a deeper understanding of how monitoring and evaluation findings are utilized during strategy implementation, interviews were conducted with senior university leaders and heads of planning units across the target universities. The interviews explored the extent to which monitoring and evaluation results contribute to organizational learning, accountability, evidence-based decision-making, and the implementation of corrective actions. "The Vice President for Academic Affairs "A" revealed that

"In our university, the universities generate substantial performance data, its contribution to strategic decision-making remains limited. Monitoring findings are primarily used to strengthen accountability by reviewing departmental performance, yet greater emphasis is placed on compliance than on organizational learning and improvement. While monitoring exercises identify corrective actions, their implementation is often constrained by limited financial resources, weak leadership commitment, frequent management turnover, and inadequate coordination among responsible units (15 February 2024)."

Also the Dean of College at University "E" revealed that:

"Monitoring findings are mainly discussed during quarterly review meetings. These meetings improve accountability because each unit is required to explain its performance against planned targets. Nevertheless, corrective actions are not always implemented due to budget constraints, limited managerial follow-up, and delays in decision-making (15 October 2024)".

Furthermore Director of Planning and Resource Mobilization indicated that:

"Monitoring and evaluation reports are prepared regularly and reviewed by university management; however, their use is largely limited to performance reporting rather than organizational learning and continuous improvement. Monitoring findings occasionally inform strategic decisions and resource allocation, but management decisions are often driven by immediate operational priorities instead of institutional evidence. Also he revealed that weak data management systems and the absence of integrated digital platforms reduce the reliability of performance information, limiting its use for evidence-based decision-making and timely corrective action during strategy implementation (15 October 2024)".

The qualitative findings corroborated the quantitative results by revealing that the effectiveness of monitoring and evaluation systems is constrained by weak leadership commitment, inadequate financial and human resources, limited technical capacity, poor data quality, fragmented reporting systems, weak interdepartmental coordination, and frequent leadership turnover. Participants further indicated that monitoring and evaluation is primarily used for compliance and accountability rather than organizational learning and evidence-

based decision-making. Although performance reviews help identify implementation gaps and recommend corrective actions, limited follow-up, budget constraints, weak data management systems, and competing operational priorities hinder the effective utilization of monitoring findings to improve strategy implementation..

Stakeholders' involvement on M& E: Interview was held with top managers and the Vice President for Academic Affairs delegate at University A revealed that:

> "*To clearly speaking stakeholder involvement in monitoring and evaluation (M&E) practices in our university is currently low for different reasons. The engagement of key stakeholders such as faculty, students, and external partners is minimal, often limited to reporting rather than active participation. This lack of involvement is attributed to unclear communication channels, insufficient awareness of M&E processes, and limited institutional mechanisms for systematic stakeholder engagement(October 2025 at 11:30 AM)"*

The low level of stakeholder engagement is due to limited awareness of M&E processes, unclear communication channels, and the absence of formal mechanisms to ensure systematic participation, indicating the need for stronger institutional strategies to involve stakeholders effectively.

4.9.4 Overall integration & Explanatory interpretation for Monitoring and Evaluation

The integrated findings from descriptive statistics, SEM analysis, and qualitative interviews indicate that monitoring and evaluation (M&E) practices in Ethiopian comprehensive universities are only partially institutionalized and remain largely compliance-oriented rather than functioning as strategic management systems. The descriptive results show moderate implementation of several M&E components, including performance indicators development (M = 2.822, SD = 0.8555), periodic performance evaluation (M = 2.772, SD = 0.8296), meetings and feedback provision (M = 3.455, SD = 0.8745), and performance reporting (M = 3.371, SD = 0.8855). However, critical components such as stakeholder involvement (M = 1.593, SD = 1.001) and adoption of corrective actions (M = 2.089, SD = 1.119) remain substantially weak. This indicates that while universities have established basic monitoring structures, these systems are not sufficiently integrated to support continuous improvement, strategic learning, and adaptive decision-making.

The moderate level of performance indicator development (M = 2.822) suggests that universities have some measurement mechanisms; however, these indicators are not consistently standardized or systematically linked with strategic objectives. Kaplan and Norton's (2020) Balanced Scorecard framework emphasizes that performance indicators serve as the bridge between strategy formulation and implementation by translating institutional goals into measurable outcomes. Similarly, Neely (2019) argues that ineffective measurement systems often create fragmented data collection practices without meaningful strategic utilization. Therefore, the findings imply that Ethiopian comprehensive universities possess monitoring instruments but lack mature performance measurement systems capable of guiding strategic decisions.

The weakest dimension, stakeholder involvement in M&E (M = 1.593, SD = 1.001), demonstrates that monitoring processes remain highly centralized and managerial-driven. The qualitative findings strongly support this result, as university leaders acknowledged that faculty, students, and external stakeholders have limited participation beyond providing information during reporting processes. This contradicts stakeholder theory, which emphasizes that inclusive participation improves organizational legitimacy, accountability, and ownership of strategic outcomes (Freeman, 2020). Bryson (2018) similarly argues that participatory evaluation approaches strengthen public sector decision-making by incorporating diverse perspectives. The limited stakeholder engagement observed in this study therefore reflects a bureaucratic evaluation culture where M&E is perceived primarily as an administrative requirement rather than a collaborative learning process.

The SEM findings provide further evidence of the strategic importance of M&E. The structural model demonstrates that M&E has a significant positive effect on both perceived efficiency ($\beta = 0.31$, CR = 5.01, $p < 0.001$) and perceived effectiveness ($\beta = 0.37$, CR = 5.12, $p < 0.001$). The findings indicate that universities with stronger monitoring systems are more likely to achieve improved resource utilization, operational coordination, goal attainment, and institutional performance. These results support Strategic Fit Theory, which argues that organizational performance improves when internal management systems are aligned with strategic priorities. The stronger effect of M&E on effectiveness compared with efficiency suggests that monitoring systems contribute particularly to achieving institutional objectives, improving accountability, and ensuring strategic alignment.

The measurement model further confirms the reliability and validity of the M&E construct. The CFA results demonstrate satisfactory internal consistency (Cronbach's $\alpha = 0.82$; CR = 0.973), strong factor loadings (0.776–0.843), and adequate convergent validity (AVE = 0.701). The overall CFA model also indicates acceptable model fit ($\chi^2/df = 1.263$, GFI = 0.852, CFI = 0.989, TLI = 0.998, RMSEA = 0.065), confirming that M&E indicators appropriately represent the construct and provide a valid basis for examining its relationship with institutional performance.

Despite the positive SEM relationship, qualitative findings explain why the practical contribution of M&E remains limited. Interview participants consistently identified weak leadership commitment, inadequate financial and human resources, limited technical capacity, poor data quality, fragmented reporting systems, weak coordination, leadership turnover, and insufficient follow-up mechanisms as major barriers. University leaders noted that M&E findings are often used for accountability reporting rather than organizational learning and continuous improvement. This supports Daft's (2021) argument that effective organizations require continuous feedback systems that identify deviations and enable timely corrective responses. The weak implementation of corrective actions found in this study (M = 2.089) indicates a breakdown between evaluation results and managerial response.

Similarly, the moderate scores for meetings and feedback provision (M = 3.455) and performance reporting (M = 3.371) indicate that communication mechanisms exist but are not fully utilized for strategic learning. Niven (2021) emphasizes that effective performance reporting should go beyond documenting activities and should support evidence-based decisions, transparency, and organizational improvement. However, interview evidence suggests that reporting practices in Ethiopian comprehensive universities remain largely compliance-driven, with limited integration into resource allocation, policy adjustment, and strategic decision-making.

Overall, the convergence of quantitative, SEM, and qualitative findings reveals that M&E systems in Ethiopian comprehensive universities are structurally present but functionally weak. Universities have established reporting systems, evaluation meetings, and performance monitoring practices; however, limited stakeholder participation, weak corrective action mechanisms, inadequate resources, and insufficient use of evidence constrain their strategic value. As Kaplan and Norton (2020), Bryson (2018), and David (2020) emphasize, effective strategy execution requires a closed-loop M&E system that integrates performance indicators,

continuous evaluation, stakeholder engagement, feedback, and corrective action. Therefore, the findings suggest that Ethiopian comprehensive universities need to transform M&E from a compliance-based reporting activity into an integrated strategic management system that supports organizational learning, accountability, and continuous performance improvement.

4.10 Major Challenges Affecting SM Practices and Mitigation Measures.

4.10.1. Quantitative analysis on internal factors Affecting SM Practices

Strategy implementation is a highly complex process that is influenced by a variety of elements (internal and external) that determine its path of action, both directly and indirectly. Internal factors play a critical role in shaping strategic management practices within higher education institutions. Examining these factors provides insight into organizational dynamics that influence strategy formulation, implementation, and monitoring, thereby establishing a foundation for understanding the drivers and barriers to effective strategic management. This sub-section gives a thorough understanding of the internal and external issues that affects strategic management adoption and implementation in comprehensive institutions, as indicated below.

Table 4.26: Internal challenges affecting adoption and implementation of SM practices

Code	In your opinion, Do the following factors affects strategy implementation in your university?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
IF1	Strategic leadership	176	4.28	0.69	2	4	3	13	78	568	4.39	0.59	1	1	3	17	78
IF2	top management commitment and support	176	4.15	0.69	1	3	3	19	74	568	4.35	0.68	1	2	3	19.9	74.1
IF3	Resource allocation	176	4.19	0.76	1.5	2	4.5	22	70	568	4.29	0.71	3	3	4.5	18.5	71
IF4	Effective communication	176	4.17	0.69	3	3	2.6	22	69.4	568	4.27	0.69	1	3	2.6	25	68.4
IF4	Involvement of stakeholders	176	4.18	0.65	1	2.4	3.1	25	68.5	568	4.17	0.65	1	2	3.1	26.4	67.5
IF5	Reward system	176	4.18	0.68	1	3.1	1.9	2.9	65	568	4.19	0.67	2	2	1.9	30.2	64.9
IF6	Effective employee training	176	4.16	0.70	2	2	3	28	65	568	4.18	0.699	1	3	2	30	64
IF7	Organizational structure and culture	176	4.02	0.97	2	2.4	3.5	27.1	65	568	4.12	0.874	1.9	2.5	3.9	25.1	63.6
IF8	Skills, knowledge & Experience	176	4.01	0.65	1	3	5	28	63	568	4.1	0.644	2	2	5.4	29.4	61.2
IF9	Strategy Consensus	176	4.01	0.58	2	3.2	4.6	41	49.2	568	4.09	0.571	1	1	11.8	40.1	46.1
IF10	Average		4.20								4.26						

Likert Scale: 1= strongly disagree; 2= Disagree; 3= Moderate; 4= Agree' 5= strongly agree

Source: Field survey Data (2024/25).

Strategic Leadership: As shown in Table 4.26, 78% of both managers and employees strongly agree that strategic leadership significantly influences strategy implementation, reflected in a mean score of μ=4.34 (SD=0.698). An additional 13% of managers and 17% of employees acknowledge its positive effect, while only a small proportion (3–4%) report moderate or no impact. These findings underscore the critical role of effective leadership in driving strategic initiatives, suggesting that fostering adaptive and proactive leadership can enhance organizational alignment and strengthen performance outcomes in complex strategic environments. The findings provide strong empirical support for the centrality of strategic leadership in implementation processes. Consistent with upper echelons theory (Hambrick & Mason, 1984) and subsequent extensions (Hambrick, 2007; Finkelstein et al., 2009), leadership shapes not only strategic direction but also the effectiveness with which strategies are executed. The high level of agreement among respondents (μ = 4.34) indicates a shared perception that leadership facilitates alignment, mobilizes resources, and coordinates organizational actors. This is particularly critical in higher education contexts, where structural complexity and stakeholder diversity demand adaptive and integrative leadership approaches (Bolden, 2016; Bryson, 2018; Fumasoli & Stensaker, 2013). Therefore, strengthening strategic leadership capacity is essential for enhancing implementation success and achieving desired organizational outcomes.

Top management Commitment & Support: As shown in Table 4.26, 78% of both managers and employees strongly agree that strategic leadership significantly influences strategy implementation, reflected in a mean score of μ = 4.34 (SD = 0.698). An additional 13% of managers and 17% of employees agree, while only a small proportion (3–4%) report moderate or no impact. These findings reinforce the centrality of strategic leadership in guiding organizational direction and execution. This result aligns with contemporary scholarship, which emphasizes that effective strategic leaders enhance vision alignment, adaptability, and organizational responsiveness in complex environments (Ireland, Hoskisson, & Hitt, 2020; Samimi et al., 2022). Thus, fostering proactive and transformational leadership is essential for improving implementation success and institutional performance.

Table 4.26 indicates that 52.2% of managers and 48.35% of employees strongly agree that top management commitment and support critically influence strategy implementation, while 41.3% and 42.95% respectively agree (μ = 3.991, SD = 0.9028). Only a small proportion expressed neutral or negative views. This strong consensus highlights the pivotal role of

leadership commitment in ensuring accountability, resource mobilization, and sustained strategic focus. The finding is consistent with recent studies (e.g., Bryson, 2018; George et al., 2019), which argue that visible and continuous top management support is a decisive driver of successful strategy execution and organizational effectiveness.

Resources Allocation: As presented in Table 4.26, 51.9% of managers and 50.9% of employees strongly agree that improper resource allocation critically affects strategy implementation, with an aggregate mean of $\mu = 4.1775$ (SD = 0.8459). A further 40.4% of managers and 39.45% of employees agree. These results highlight the importance of aligning financial, human, and material resources with strategic priorities. This finding is supported by the resource-based view (Barney, 1991; updated discussions in Barney et al., 2021), which emphasizes that effective allocation and deployment of resources are fundamental to achieving competitive advantage and successful strategy execution.

Effective Communication: Table 4.26 shows that 47.2% of managers and 47.05% of employees strongly agree that ineffective communication hinders strategy implementation, while about 40% in both groups agree ($\mu = 4.046$, SD = 0.9376). These findings suggest that communication gaps remain a critical barrier. This is consistent with recent literature (Heide, et.al, 2019; Men, 2021), which underscores that clear, consistent, and transparent communication enhances employee understanding, commitment, and alignment with strategic goals.

Participation of staff and other stakeholders: Table 4.26 presents the descriptive analysis of staff and stakeholder participation in strategy implementation. A majority of respondents, 66.8% of managers and 57.65% of employees, strongly agree that insufficient participation critically affects the execution of strategic management practices, while 23.7% of managers and 32.05% of employees agree, resulting in an aggregate mean of 4.385 (SD=0.8214). Smaller proportions reported moderate influence (4.75% managers; 6.15% employees), disagreement (3.65% managers; 2.95% employees), or strong disagreement (1.25% managers and employees). The result aligns with participatory management theories and recent empirical studies (Bryson et al., 2017; Pedersen & Döös, 2023), which demonstrate that stakeholder involvement fosters ownership, reduces resistance, and improves implementation effectiveness.

Reward & Motivation: Table 4.26 indicates that 67% of managers and 55.5% of employees strongly agree that the lack of an appropriate incentive system critically affects the execution of strategic management practices, while 23.2% of managers and 34.85% of employees agree, with an aggregate mean of 4.2913 (SD=0.8894). Smaller proportions reported moderate influence (5.8% managers; 4.9% employees), disagreement (3.55% managers; 3.2% employees), or strong disagreement (0.65% managers; 1.6% employees). These results underscore the pivotal role of incentive structures in facilitating effective strategy implementation, highlighting that insufficient incentives can significantly hinder the successful adoption and execution of strategic management practices. This finding is consistent with Alkandi (2023), who demonstrated that extrinsic rewards, such as compensation, are strongly associated with enhanced staff morale, reduced turnover intentions, improved productivity, and overall organizational effectiveness, underscoring the importance of incentive systems in supporting strategic management practices.

Training and staff development: Table 4.26 shows that 51.2% of managers and 49.4% of employees strongly agree that ineffective employee training critically affects the adoption and execution of strategic management practices, while 39.6% of both groups agree, yielding a mean of 4.129 (SD=0.8994). Smaller proportions reported moderate influence (3.16% managers; 7% employees), disagreement (4.8% managers; 2.65% employees), or strong disagreement (1.25% managers; 1.35% employees). These results highlight a shared recognition across organizational levels of the importance of effective training in enhancing strategic management practices. This aligns with Pham (2021), who observed that leaders trained in strategic management are more likely to achieve institutional performance targets, emphasizing staff training as a critical component of successful plan implementation.

Structural/bureaucratic complexity and culture: Table 4.26 shows that 57% of both managers and employees strongly agree that structural and bureaucratic complexity influences the strategy development process, while 34.8% of managers and 34.75% of employees agree, with an aggregate mean of 4.136 (SD = 0.8817). Smaller proportions reported moderate influence (3.9% managers; 4.1% employees), disagreement (2.95% managers; 3.45% employees), or strong disagreement (1.25% managers; 0.8% employees). These results reflect a strong consensus across organizational levels on the impact of structural complexity on strategic management processes. This finding is consistent with literature suggesting that bureaucratic and formalized structures within organizations can

constrain strategic development and implementation by embedding rigid procedures and hierarchical authority that impede flexibility and integration (Woelert & Stensaker, 2025 & Mailu, et.al 2018).

Skills, knowledge and experience of top management: Table 4.26 indicates that 66.8% of managers and 58.15% of employees strongly agree that the skills, knowledge, and experience of top management critically influence the execution of strategic management practices, while 23.3% of managers and 34.95% of employees agree, with a mean of 4.355 (SD = 0.7855). Smaller proportions reported moderate influence (5.75% managers; 3.5% employees), disagreement (1.9% managers; 1.7% employees), or strong disagreement (2.75% managers; 1.7% employees). The result aligns with upper echelons theory and recent empirical work (Hambrick, 2007; Neely et al., 2020), which emphasize that executives' skills, experience, and cognitive capabilities shape strategic decisions and organizational outcomes.

Strategy Consensus*:* Table 4.26 presents aggregate responses indicating that 49.2% of managers and 46.1% of employees strongly agree that a lack of alignment between vision, strategic objectives, and activities adversely affects strategy implementation, with a mean of 4.05 (SD = 0.575). Additionally, 41% of managers and 40.1% of employees agree, while 4.6% of managers and 11.8% of employees report a moderate impact. A smaller proportion disagreed or strongly disagreed (2–3.2% managers; 1–1% employees). These results underscore the critical importance of aligning vision, objectives, and actions as a foundation for effective strategy implementation. Research indicates that strategic alignment—particularly the congruence between organizational vision, objectives, and actions—is essential for successful strategy implementation. Alignment ensures that all organizational efforts are coordinated toward common goals, enhancing clarity, commitment, and performance outcomes (Mitchell, 2025; Ward & Bickford, 1996).

4.10.2 Qualitative Data Analysis on internal factors affecting SM practices

To complement the quantitative findings, qualitative data were gathered through interviews with university leaders. The responses reinforced the perceptions of both managers and employees. For instance, top management from University "C" revealed that:

> "*As my experience, key internal challenges hindering strategic management implementation, including inadequate resources (technology, infrastructure, and*

skilled personnel), economic inflation, weak top management support and follow-up, poor communication, resistance to change, misalignment of organizational culture, frequent structural and policy changes, leadership instability, skill and attitude gaps, low commitment, weak monitoring systems, absence of rewards, and the dynamic higher education and political landscape in Ethiopia(10 April, 2024: 3:30AM).

These insights corroborate the quantitative evidence, highlighting that internal factors particularly leadership, resources, culture, and organizational alignment play a critical role in shaping the effectiveness of strategic management practices.

4.10.3 Integrated Results on Internal Factors Affecting SM Practices

Quantitative and qualitative findings consistently demonstrate that strategic management practices in Ethiopian comprehensive universities are significantly influenced by interrelated internal organizational factors, including leadership, resource availability, communication, participation, incentives, and institutional capacity. The high mean scores across variables (approximately $\mu = 3.99–4.38$) indicate strong consensus among respondents regarding the importance of these factors in strategy implementation. These findings are consistent with Bryson (2018) and Hrebiniak (2005), who argued that successful strategy implementation largely depends on internal organizational conditions and leadership commitment.

Strategic leadership and top management commitment emerged as the most influential factors, confirming that strategy implementation is highly leadership-dependent. This supports Jooste & Fourie (2009), who emphasized the central role of leadership in coordinating and aligning strategic activities. Similarly, inadequate financial, human, and material resources constrained implementation effectiveness, supporting Barney's (1991) Resource-Based View that organizational performance depends on effective resource utilization. Weak communication and limited participation also reduced shared understanding and ownership of strategic goals, consistent with Beer and Eisenstat (2000), who identified poor communication and low employee involvement as major barriers to strategy implementation.

Furthermore, inadequate incentives, limited staff development, bureaucratic structures, leadership competency gaps, and resistance to change weakened institutional implementation capacity. These findings align with Armstrong (2020), Mintzberg (1994), and Kotter (1996), who emphasized that motivation, organizational flexibility, leadership competency, and

supportive institutional culture are essential for effective strategy execution and organizational performance.

Overall, the integration of findings indicates that strategic management effectiveness in Ethiopian universities is not determined by a single factor but by the interaction of leadership quality, resource sufficiency, communication effectiveness, staff capability, and organizational structure. These internal factors collectively explain the observed quantitative patterns and highlight that improving strategic management outcomes requires coordinated strengthening of both human and organizational systems.

4.11. External variables that can affect SM Practices

4.11.1 Descriptive analysis of External variables that can affect SM Practices

External factors significantly influence the effectiveness of strategic management (SM) practices in comprehensive universities. Regulatory, political, economic, and societal conditions may either facilitate or constrain strategy formulation, implementation, and evaluation. Accordingly, the following section presents findings on the influence of external factors on SM practices.

Table 4.27 an aggregate responses on external factors affecting SM practices

Code	To what extent do environmental variables affect SMPs in your university?	Respondents rating/agreement															
		Managers								Staffs							
		No	M	SD	1	2	3	4	5	No	M	SD	1	2	3	4	5
EF1	Level of environmental Uncertainty	176	4.35	0.97	2.1	3.85	5.15	37.7	51.3	568	4.32	0.96	3	4.1	3.5	33.9	55.5
EF2	Economic situation/inflation	176	4.12	0.96	2.1	6.05	3.95	38.5	49.5	568	4.30	1.10	4.65	5.45	7.8	37.7	44.4
EF3	Dynamic & rapidly changing environment	176	4.49	0.70	0.5	3.65	5.3	34.5	56.1	568	3.96	1.12	7.3	8.8	6.85	22.2	54.9
EF4	Frequent policy change	176	4.18	0.84	0.5	1.75	9.4	36.1	52.3	568	4.02	1.03	2.6	8.6	10.9	34.6	43.7
EF5	Technology in-use	176	4.50	0.86	0.2	5.1	8.45	16.3	70.1	568	4.32	0.85	1.1	6.25	8.25	29.1	55.4
	Average		4.33	0.87	1.08	4.08	6.45	32.6	55.8		4.18		3.73	6.64	7.47	31.4	50.7

Likert Scale: 1= strongly disagree; 2= Disagree; 3= Moderate; 4= Agree' 5= strongly agree

Source: Field Survey Data (2024/25)

Level of environmental uncertainty: As shown in Table 4.27, 51.3% of managers and 55.5% of employees strongly agree, while 37.65% of managers and 33.65% of employees agree that uncertainty influences strategy development. A smaller proportion, 5.15% of managers and 3.5% of employees, reported a moderate effect. In contrast, 3.85% of managers and 4.1% of employees disagree, and 2.1% of managers and 3% of employees strongly disagree. Overall, the relatively high aggregate mean score ($\mu = 4.338$) with a standard deviation of .9632 suggests a strong consensus among respondents that uncertainty considerably affects the strategy development process. The high aggregate mean ($\mu = 4.338$) indicates that uncertainty is widely perceived as a significant external factor influencing the strategy development process in the universities.

Economic Context: Table 4.27 shows that 49.2% of managers and 44.5% of employees strongly agree, and 38.45% of managers and 37.7% of employees agree that the economic situation and inflation affect the strategy development process, while 3.95% of managers and 7.8% of employees report a moderate effect; only 6.05% and 5.45% disagree and 2.1% and 4.65% strongly disagree, with an aggregate mean of $\mu = 4.213$ and SD = 1.032, indicating that economic instability and inflation are widely perceived as significant external constraints on effective strategic planning in universities.

Dynamics & rapidly changing environment: As presented in Table 4.27, 56.1% of managers and 54.9% of employees strongly agree, and 34.5% of managers and 22.15% of employees agree that dynamic and rapidly changing environments affect the strategy development process, while 5.3% of managers and 6.85% of employees report a moderate effect; only 3.65% and 8.8% disagree and 0.5% and 7.3% strongly disagree, with an aggregate mean of $\mu = 4.225$ and SD = .9135, indicating that environmental dynamism is widely recognized as a significant factor shaping strategy development in universities**.**

Frequent Regulatory & Policy Changes: Table 4.27 shows that 52.3% of managers and 43.7% of employees strongly agree, and 36.05% of managers and 34.15% of employees agree that frequent policy changes seriously affect the adoption and execution of strategic management practices, while 9.4% of managers and 10.95% of employees report a moderate effect; only 1.75% and 8.6% disagree and 0.5% and 2.6% strongly disagree, with an aggregate mean of $\mu = 4.101$ and SD = .9310, indicating that policy instability is widely perceived as a major external challenge to effective SM practices in universities.

Adaptation of Appropriate Technology: Table 4.27 shows that 70.1% of managers and 55.4% of employees strongly agree, and 16.3% of managers and 29.05% of employees agree that lack of technology-in-use affects the strategy development process, while 8.45% of managers and 8.25% of employees report a moderate effect; only 5.1% and 6.25% disagree and 0.2% and 1.1% strongly disagree, with an aggregate mean of $\mu = 4.416$ and SD = .8570, indicating that inadequate technological infrastructure is widely perceived as a critical barrier to effective strategy development in universities. This result directly aligns with the findings of Mittal et al. (2025), Selwyn (2024), and Kalimullina et al. (2021), who acknowledge that the digitalization of education enhances several quality-related factors, including infrastructure, pedagogical approaches, organizational processes, and the renewal, simplification, and improvement of tasks, operations, internationalization, and educational outputs.

4.12 Chapter Summary

The study employed a mixed research method with a pragmatic paradigm. The quantitative and qualitative data were gathered through questionnaires, interviews, and FGDs. The questionnaire was confirmed with a reliability test of an alpha value greater than 0.812. The study demonstrates that the core components of strategic management environmental scanning, strategy formulation, strategy implementation, and monitoring and evaluation (M&E) have statistically significant and positive influences on overall strategic management practices in higher education institutions. These findings are consistently supported by the perceptions of two key respondent groups: managers/leaders and employees/staff, indicating a shared institutional understanding of the strategic management process.

Using descriptive statistical analyses (frequency distributions, percentages, means, and standard deviations), the results reveal moderate agreement across respondents regarding the presence and relevance of strategic management practices. However, variations in mean scores and dispersion values suggest differences in the depth and effectiveness of implementation across strategic dimensions. These descriptive findings are further reinforced by Structural Equation Modeling (SEM), which confirms the positive and significant causal relationships between the strategic management dimensions and overall strategic management performance.

The empirical findings of this study strongly align with Strategy Fit Theory, which posits that organizational performance is maximized when internal strategic processes are coherently aligned with external environmental conditions and institutional capabilities. The statistically significant and positive effects of environmental scanning, strategy formulation, strategy implementation, and monitoring and evaluation (M&E) on strategic management practices confirm that strategic effectiveness in higher education institutions (HEIs) depends on the degree of alignment or *fit* between environmental demands and strategic responses.

Environmental scanning emerges as a foundational mechanism for achieving strategic fit, as it enables institutions to systematically assess political, economic, technological, and competitive pressures shaping the higher education landscape. However, the study's finding that strategies remain inefficient and ineffective in critical domains such as fundraising, stakeholder satisfaction, quality improvement, internationalization, and digitalization indicates a misalignment between environmental realities and strategic choices, thereby weakening strategic fit. From a Strategy Fit perspective, this misalignment explains why formally developed strategies fail to translate into improved organizational outcomes.

The dominance of a top-down approach in strategy formulation further reinforces Strategy Fit Theory by illustrating how strategic alignment is often driven by senior leadership. While this approach ensures vertical alignment with institutional missions and regulatory expectations, the limited participation of employees and staff reduces horizontal alignment across operational units. Consequently, strategy implementation suffers, as lower-level actors lack ownership and contextual adaptation capacity, undermining the realization of strategic fit in practice.

The findings also resonate strongly with the Resource-Based View (RBV), which emphasizes that sustainable organizational advantage derives from the effective deployment of valuable, rare, inimitable, and non-substitutable (VRIN) resources. The positive influence of strategy implementation and M&E on strategic management practices reflects the role of managerial capabilities, organizational routines, and institutional learning mechanisms as strategic resources. However, the limited effectiveness of developed strategies in achieving key outcomes suggests that HEIs are underutilizing or misconfiguring their internal resources, particularly human capital, digital infrastructure, governance structures, and stakeholder relationships.

The study's evidence that comprehensive universities are not sufficiently familiar with digital technologies for strategic communication further underscores RBV arguments. Digital capabilities constitute critical intangible resources that enable coordination, transparency, and responsiveness. The absence or weak integration of such capabilities constrains the institutions' ability to convert strategies into performance-enhancing actions, thereby limiting resource-based advantages.

Moreover, internal and external factors such as weak accountability systems, constrained institutional autonomy, regulatory interference, and limited funding flexibility impede the effective mobilization of strategic resources. From an RBV standpoint, these constraints prevent HEIs from transforming existing assets into strategic capabilities. The proposed interventions strengthening accountability and governance, ensuring meaningful institutional autonomy, allocating adequate resources, leveraging advisory boards, and integrating digital technologies into strategic processes, fostering reward and motivation system and enhancing stakeholder engagement directly address these limitations by improving resource orchestration and capability deployment. These measures are expected to improve the effectiveness of strategy implementation and enhance overall strategic management performance.

In synthesis, the combined application of Strategy Fit Theory and RBV provides a robust explanatory framework for the study's findings. Strategy Fit Theory explains *why* misalignment between environment and strategy leads to weak performance, while RBV explains *how* insufficient utilization of internal resources and capabilities undermines strategic effectiveness. Together, the theories illuminate that improving strategic management practices in HEIs requires both external–internal alignment and capability-based execution, positioning strategic management as a dynamic and resource-driven process rather than a purely formal planning exercise.

CHAPTER FIVE

5. Summary of Major Findings, Conclusions, Recommendations

Introduction

This chapter discusses a synthesis of the study's summary, key findings on strategic management practices in comprehensive universities, focusing on their efficiency and effectiveness. It summarizes how universities engage in environmental scanning, strategy formulation, implementation, and monitoring and evaluation, highlighting areas of strength and critical gaps. The chapter further interprets these findings in light of strategic management theory, draws conclusions regarding institutional performance, and provides evidence-based recommendations to improve the efficiency and effectiveness of SM practices. Finally, it outlines implications for policy, practice, and future research.

Over the past 20 years, research on strategic management practices has grown. The body of knowledge pertaining to higher education management has been greatly expanded by academics, policymakers, and practitioners who have studied various aspects of SM practices in higher education. Even though several facets of SM practices have been studied, higher education management continues to face difficulties that require for further research into the effectiveness and efficiency of SM practices. Therefore, the purpose of the research was to analyze the efficiency and effectiveness of SM practices at comprehensive universities in Ethiopia. The study endeavored to address the following basic questions:

1. How do the comprehensive universities in Ethiopia conduct environment scanning?
2. How do the comprehensive universities in Ethiopia develop strategies?
3. To what extent are strategic management frameworks efficiently and effectively align with implementation outcomes in public universities in Ethiopia? What critical success factors influence strategy implementation?
4. How are strategic management practices monitored and evaluated in comprehensive universities?

This study employed a rigorous mixed-methods approach to provide a comprehensive understanding of strategic management practices in higher education institutions. A sequential explanatory mixed method (QUAN-QUAL) descriptive survey design was adopted, with

quantitative data collected through questionnaires administered to managers, employees, and the Federal Ministry of Education, while qualitative data were obtained via semi-structured interviews with top and middle management, and heads of development planning and budgeting. Focus group discussions with student union representatives further enriched the qualitative insights, complementing the quantitative evidence. Policy documents, including Higher Education Proclamation No. 1152/2019, education sector development roadmaps, and 5- and 10-year development plans, were examined to capture contextual perspectives beyond survey data. The qualitative findings reinforced the quantitative evidence regarding weak structural alignment. While survey respondents reported moderate implementation levels, interview participants explained that bureaucratic rigidity, unclear reporting lines, and political interference limited effective alignment. Data analysis combined descriptive statistics (frequency, percentage, mean, SD) and inferential techniques (correlation, multivariate regression, factor analysis, and structural equation modeling) using SPSS 27 and AMOS 23. Quantitative and qualitative data were integrated through a theme-based approach across Environmental Scanning, Strategy Formulation, Strategy Implementation, and Monitoring & Evaluation, alongside a review of relevant literature to consolidate the theoretical and empirical foundations of the study.

5.1. Summary of the Major Findings

The practice of environmental Scanning: The study findings indicates that environmental scanning (ES) in Ethiopian comprehensive universities is moderately practiced and only partially institutionalized. Overall implementation remains at a moderate level ($M = 2.75$, $SD = 1.02$; Cronbach's $\alpha = 0.76$), although structural equation modeling shows that ES significantly enhances the efficiency ($\beta = 0.61$, C.R. $= 5.32$, $p < 0.001$) and effectiveness ($\beta = 0.65$, C.R. $= 5.45$, $p < 0.001$) of strategic management practices. Among the ES dimensions**,** SWOT analysis and the monitoring of national educational trends are relatively well established. About 71.65% of managers and staff confirmed the strong application of SWOT analysis ($M = 3.96$, $SD = 1.02$), while 67.1% of managers and 80.1% of staff reported that universities regularly monitor national higher education trends ($M = 3.671$, $SD = 0.970$). Qualitative evidence further shows that these practices help universities align their institutional strategies with national policies and

reform agendas, although SWOT is often conducted as a routine procedural exercise rather than as a deeper strategic assessment.

In contrast, several critical dimensions of environmental scanning remain weakly conducted, particularly PESTEL analysis, competitive advantage assessment, identification of students' needs, and stakeholder engagement. A majority of respondents indicated that macro-environmental factors are not systematically analyzed (M = 2.265, SD = 1.032), largely due to limited analytical capacity and insufficient external data. Similarly, universities rarely evaluate their distinctive institutional capabilities (M = 2.225, SD = 0.997), and strategic plans seldom highlight unique academic programs or research strengths. The assessment of students' needs (M = 2.275, SD = 0.8285) and stakeholder analysis (M = 2.11, SD = 0.8285) are particularly weak, reflecting minimal involvement of students, alumni, employers, and other stakeholders in the scanning stage. Although the SEM model demonstrates acceptable fit indices ($\chi^2/df = 1.378$; CFI = 0.962; TLI = 0.965; RMSEA = 0.068), the overall results reveal a clear imbalance between internally oriented scanning and broader external and participatory environmental analysis in Ethiopian universities.

The practice of Strategy Formulation*:* The findings indicate that mission formulation is relatively well practiced. The quantitative results show a relatively high mean score (M = 3.749, SD = 0.9101), suggesting that most universities have established mission statements. Interview participants confirmed that mission development usually follows structured procedures involving steering and technical committees and the use of environmental scanning tools such as SWOT analysis. However, several core components of strategy formulation show notable weaknesses. The descriptive results reveal low levels of practice in setting strategic goals (M = 2.174, SD = 0.9378), developing alternative strategies (M = 2.079, SD = 0.9562), and selecting the most feasible strategies (M = 2.021, SD = 1.0741). Interview evidence indicates that these limitations are largely associated with top-down directives from the Ministry of Education, which reduce institutional flexibility and limit the development of context-specific strategic alternatives. Mixed performance was also observed in operational planning activities. While setting quantitative targets shows a moderate level of practice (M = 3.267, SD = 0.9426), other aspects such as setting SMART objectives (M = 2.2515), prioritizing tasks (M = 2.244), and allocating adequate resources (M = 2.026) received relatively low ratings. Interview participants explained

that these weaknesses are related to limited institutional capacity, coordination challenges, and resource constraints in translating strategic intentions into operational plans. Overall, the aggregate mean score across the eight strategy formulation dimensions (M = 2.48) indicates that strategy formulation practices remain relatively weak and not fully institutionalized in the universities studied.

Despite these limitations, the SEM results demonstrate that strategy formulation has a significant positive influence on institutional performance. Specifically, strategy formulation significantly affects efficiency ($\beta = 0.42$, CR = 3.72, $p < 0.001$) and effectiveness ($\beta = 0.45$, CR = 3.76, $p < 0.001$). The measurement model also shows good fit **(**$\chi^2/df = 1.467$, CFI = 0.979, TLI = 0.988, GFI = 0.876, RMSEA = 0.076), confirming the reliability of the construct. Overall, the findings suggest that although current strategy formulation practices are relatively weak, strengthening these practices could significantly improve institutional efficiency and effectiveness in Ethiopian comprehensive universities.

The Practice of communicating the strategy: The findings reveal that Strategy communication in Ethiopian comprehensive universities is dominated by traditional mechanisms, with formal channels serving as the backbone of information flow with an aggregate mean score of μ=4.05.. Regular reports are most widely used **(**M = 4.322, SD = 0.934), correlating strongly with virtual platforms **(**r = 0.632**),** email **(**r = 0.444**),** and cascading strategies **(**r = 0.284**).** Letters and printed materials **(**M = 4.139, SD = 0.699**)** are strongly linked to meetings **(**r = 0.709**)** and phone conversations **(**r = 0.386), but negatively with email **(**r = -0.198) and reports **(**r = -0.475**).** Conferences and meetings **(**M = 3.951, SD = 0.695**)** function as central interactive platforms, positively associated with letters **(**r = 0.709**)** and phone **(**r = 0.365**),** yet negatively with reports **(**r = -0.389**)**. Cascading strategies show moderate practice (M = 3.787, SD = 0.967**)** and relate positively to reports **(**r = 0.284) and virtual platforms (r = 0.218) but negatively with letters (r = -0.136) and meetings (r = -0.133). *Digital platforms* remain underutilized. Email **(**M = 2.121, SD = 1.135**)** and phone **(**M = 2.074, SD = 1.199**) a**re weakly practiced, while websites **(**M = 1.742, SD = 1.169) and virtual platforms **(**M = 1.236, SD = 1.297**)** are rarely used, though they correlate positively with formal channels. Interviews highlight technical limitations, low digital literacy, and lack of policy as major barriers. Overall, strategy communication is largely formal,

hierarchical, and paper-based, with digital mechanisms offering untapped potential to improve efficiency, transparency, and alignment in strategic management.

Approaches to Develop Strategies: The study findings show that strategy development in Ethiopian comprehensive universities is overwhelmingly top–down, dominated by senior leadership and strongly guided by national policy directives. Quantitative results indicate that 63.15% of managers and 52.8% of employees strongly agreed, with an aggregate mean of μ = 4.480, SD = 0.864, that strategy formulation is initiated by presidents and vice presidents. Interviews confirm that colleges and departments primarily align operational plans with these top-level decisions, highlighting limited involvement of lower-level units in shaping strategic directions. This dominance reflects the hierarchical governance structure of public universities and ensures alignment with Ministry of Education priorities, promoting institutional coherence, regulatory compliance, and faster strategic decision-making. In contrast, bottom–up participation is minimal, with 52.1% of managers and 51.5% of employees strongly disagreeing that operational units contribute to strategy formulation (μ = 2.339, SD = 0.985). The equal application of top–down and bottom–up approaches is rare (μ = 1.914, SD = 0.988), while strategy development is heavily influenced by the MoE (41.9% of managers and 37.6% of employees strongly agreed, μ = 3.623, SD = 1.035). Interviews and document analysis show that institutional strategies largely cascade from national development plans. While the top–down approach ensures policy coherence, uniformity, and coordinated action, it simultaneously reduces participatory engagement, ownership, and context-specific innovation, indicating a critical need to strengthen bottom-up mechanisms to enhance strategic commitment, participation and institutional effectiveness.

The practices of strategy implementation: The study findings show that strategy implementation in Ethiopian comprehensive universities is moderately established but operationally constrained, with an overall mean of M = 2.49, SD = 0.85 and high reliability (α = 0.81). Individually, delegation of authority (M = 2.209**)** is limited, as centralized leadership restricts middle managers' autonomy; institutional restructuring (M = 2.417) is weak, constrained by externally dictated structures; policies and procedures (M = 3.048) are moderately developed but lack supporting operational flexibility; employee reward systems (M = 1.688) are almost absent, reducing staff motivation; resource allocation (M = 2.735) and change management practices (M

= 2.735) are moderate, but inadequate funding, infrastructure, and inconsistent change practices hinder effectiveness. Interviews confirmed these patterns, highlighting centralized decision-making, insufficient restructuring, minimal rewards, and resource limitations as key barriers. SEM results, supported by CFA (χ^2/df = 1.167, CFI = 0.992, TLI = 0.991, PCFI = 0.891, RMSEA = 0.069)**,** show that strategy implementation significantly enhances efficiency ($\beta = 0.42$, C.R. = 4.52, $p < 0.001$) and effectiveness ($\beta = 0.48$, C.R. = 4.61, $p < 0.001$)**.** These findings indicate that strengthening all six dimensions authority, structure, policies, rewards, resources, and change management is critical for translating strategic plans into effective institutional outcomes and improving overall performance.

The efficiency and effectiveness of the Developed strategies: The findings of the study show that strategic efficiency and effectiveness in comprehensive universities demonstrates uneven performance, with aggregated descriptive mean score of 2.44**,** indicating low levels of efficiency & effectiveness across strategic parameters. Moderate implementation was observed in leaders' and staff capabilities (M = 2.626, SD = 0.875) and stakeholder involvement (M = 2.697, SD = 0.743)**,** suggesting partial improvement in human capacity and participatory engagement. Similarly, improving quality education (M= 1.49, SD= 0.5101), resource utilization and infrastructure (M = 2.376, SD = 0.867) and governance (M = 2.076, SD = 0.830) reflect relatively weak implementation, while technology utilization (M = 2.001, SD = 1.036)**,** partnership expansion (M = 2.102, SD = 0.830)**,** internationalization (M = 1.732, SD = 1.051)**,** and fundraising and income generation (M = 1.557, SD = 0.8625) show substantial dissatisfaction among respondents. In contrast, relatively moderate outcomes were reported for research and community services (M = 3.534, SD = 0.935) indicating better performance in core academic activities. However, the MMR results reveal that these strategic parameters collectively and significantly influence strategy performance (Wilks' Lambda = 0.45, F (10, N−10) = 5.23, $p < 0.001$)**.** Specifically, leaders' and staff capabilities ($\beta = 0.32$, $p = 0.002$)**,** governance ($\beta = 0.29$, $p = 0.004$)**,** stakeholder involvement ($\beta = 0.25$, $p = 0.008$)**,** and resource allocation ($\beta = 0.21$, $p = 0.034$) significantly predict strategy efficiency ($R^2 = 0.62$), while educational quality improvement ($\beta = 0.35$, $p = 0.001$)**,** research and community services ($\beta = 0.28$, $p = 0.005$)**,** fundraising and income generation ($\beta = 0.27$, $p = 0.007$)**,** and partnership expansion ($\beta = 0.22$, $p = 0.021$) significantly predict strategy effectiveness ($R^2 = 0.65$)**,** with

technology (β = 0.18, p = 0.053) and internationalization (β = 0.19, p = 0.061) showing marginal effects. Overall, the findings suggest that although several strategies show weak practical implementation, they remain significant determinants of institutional performance, indicating substantial latent potential for improving both operational efficiency and strategic effectiveness if implementation gaps are addressed.

Critical success factors impacting strategy implementation: The study findings show that strategy implementation in Ethiopian comprehensive universities is primarily influenced by four core critical success factors (CSFs): top management commitment and strategic leadership, adequate resource allocation, staff training and career development, and effective communication mechanisms. Quantitative evidence indicates strong consensus among respondents: top management commitment **(**M = 4.5265, SD = 0.752, factor loading = 0.846), training and career development (M = 4.206, SD = 0.817, loading = 0.673), resource allocation (M = 4.195, SD = 0.874, loading = 0.701), and communication (M = 4.128, SD = 0.914, loading = 0.642**)**. Factor analysis extracted four components explaining 68.46% of total variance, with KMO = 0.907 indicating excellent sampling adequacy and Bartlett's Test of Sphericity (χ^2 = 8283.652, p < 0.001**)** confirming the suitability of the data. Interviews revealed that while universities emphasize strategic plan formulation, leadership commitment, resource mobilization, training, and effective communication are essential to operationalize strategies successfully. Other CSFs including employee and stakeholder involvement **(**M = 4.151, loading = 0.580**),** continuous improvement (M = 3.943, loading = 0.517), rewards, and customer satisfaction play supportive roles, enhancing implementation when aligned with primary factors. Qualitative insights indicate that national policy frameworks guide priorities, but context-specific conditions are sometimes overlooked, limiting the effectiveness of implementation. Overall, these findings suggest that universities must deliberately identify, prioritize, and manage both primary and supporting CSFs to ensure that strategies are effectively executed and translated into tangible institutional outcomes**.**

The Practices of Monitoring and Evaluation: The findings of the study show that monitoring and evaluation (M&E) practices in Ethiopian comprehensive universities are only partially institutionalized, as reflected in the overall descriptive statistics and measurement model results with an aggregate score mean (μ= 2.68). . Developing performance indicators recorded a

moderate aggregate mean of M = 2.822 (SD = 0.8555), while periodical performance evaluation also showed moderate implementation with M = 2.772 (SD = 0.8296). Similarly, performance report collection (M = 3.371, SD = 0.8855) and meetings and feedback after evaluation (M = 3.455, SD = 0.8745) demonstrate relatively better practice across departments. However, stakeholder involvement in M&E (M = 1.593, SD = 1.001) and corrective actions following evaluation (M = 2.089, SD = 1.119) remain weakly practiced. The reliability analysis confirmed strong internal consistency of the construct (Cronbach's α = .87), while CFA supported the validity of all indicators. Qualitative interview responses corroborate these findings; college deans and senior administrators reported that although some departments develop performance indicators and hold evaluation meetings, implementation remains inconsistent due to limited training, weak coordination, and absence of standardized reporting formats.

The structural equation modeling (SEM) results further demonstrate that monitoring and evaluation significantly influence institutional performance. The CFA model fit indices confirmed a good measurement model (χ^2/df = 1.263, GFI = 0.852, CFI = 0.989, TLI = 0.998, PCFI = 0.868, RMSEA = 0.065). The structural model indicates that M&E practices have a positive and statistically significant effect on efficiency (β = 0.31, CR = 5.01, $p < 0.001$) and an even stronger influence on effectiveness (β = 0.37, CR = 5.12, $p < 0.001$), thereby supporting H5a and H5b. Interview responses explain that evaluation results are often discussed in departmental meetings but rarely translated into corrective actions due to unclear accountability structures, limited managerial authority, and weak follow-up mechanisms. Consequently, while existing M&E practices contribute positively to improving efficiency and effectiveness, the findings indicate that strengthening stakeholder participation, standardized indicators, and institutional corrective mechanisms is essential to transform monitoring and evaluation into a strategic tool for improving university performance.

Major challenges affecting SM practices and Mitigation measures/strategies

The internal and external challenges affecting the SM practices: The findings of the study show that the effectiveness and efficiency of strategic management (SM) practices in Ethiopian comprehensive universities are critically hindered by both internal and external factors. Internally, deficiencies such as lack of top management commitment, dynamic leadership,

managerial skills, experience, adequate resource allocation, appropriate organizational structure, reward systems, effective communication, staff development, and stakeholder involvement were prominent, with a mean score of μ = 4.21. Misalignment between institutional vision and objectives further compounds inefficiency, as noted by Willoughby (2020), while Romano (2015) highlights that top management commitment, coherent alignment enhances communication, decision-making, efficiency, and goal attainment; without it, universities face ambiguity, poor coordination, and weakened strategic focus. Externally, uncertainty, economic instability, inflation, rapid environmental changes, frequent policy shifts, and inadequate technological adoption (μ = 4.26) exacerbate challenges, forcing managers to make decisions under complexity and resource constraints. Collectively, these findings underscore that without adaptive leadership, strategic foresight, and systemic alignment, SM practices cannot achieve their intended institutional performance, leaving universities ill-prepared to navigate dynamic higher education environments.

Respondents' Proposed Institutional Strategies to Mitigate challenges: The findings of the study show that overcoming the bottlenecks impeding strategic management (SM) practices in Ethiopian comprehensive universities requires a multifaceted approach, reflected by a high mean score of μ = 4.33. Key measures include enhancing accountability, strengthening governance, ensuring institutional autonomy, improving stakeholder involvement, fostering effective communication, harmonizing organizational structures, developing clear performance indicators (KPIs), providing adequate resources, investing in staff training and career development, implementing performance-based funding, and cultivating an aspirational shared vision. Prior research confirms that staff development equips employees with critical skills and knowledge, directly enhancing organizational productivity and efficiency (Akram et al., 2023; Khan & Khan, 2011). Similarly, increasing accountability, governance, resource allocation, and stakeholder engagement facilitates collaborative problem-solving and broad support for strategic decisions (Macheridis & Paulsson, 2021), while alignment of structure, resources, and operations with long-term goals and vision strengthens organizational efficiency and effectiveness (Romano, 2015). Collectively, these strategies provide a coherent roadmap for effective SM practices in higher education institutions.

5.2. Conclusions

This subsection presents the overarching conclusions of the study, synthesizing the key findings related to Strategic Management Practices (SMP) in Ethiopian comprehensive universities. Drawing on the analysis of environmental scanning, strategy formulation, strategy implementation, monitoring and evaluation, and the critical success factors and challenges influencing SMP, the conclusions highlight the overall impact of strategic management on institutional efficiency and effectiveness. They also underscore the conditions and mechanisms necessary for universities to strengthen strategic processes, enhance organizational performance, and achieve sustainable outcomes in the dynamic higher education environment.

Environmental Scanning process: The study concludes that environmental scanning in Ethiopian comprehensive universities remains partially institutionalized and strategically irregular, reflecting a limited integration of comprehensive analytical practices within institutional strategic management. Although universities demonstrate a relatively stronger orientation toward internal assessment and alignment with national higher education policies primarily through the application of SWOT analysis and monitoring of national educational trends environmental scanning is largely practiced as a procedural requirement rather than as a robust strategic mechanism for anticipating environmental change and strengthening institutional positioning. The limited attention given to macro-environmental analysis, competitive advantage assessment, stakeholder engagement, and systematic identification of students' needs indicates that strategic planning processes remain predominantly internally focused and policy-driven, with insufficient emphasis on external dynamics and demand-based considerations. Consequently, while environmental scanning exhibits a substantial potential to enhance the efficiency and effectiveness of strategic management practices, its strategic value can only be fully realized when universities institutionalize a more comprehensive, evidence-based, and outward-looking scanning approach that integrates macro-environmental intelligence, stakeholder perspectives, and market-oriented analysis into the core processes of institutional strategy development and decision-making.

Strategy Formulation Practices: The study concludes that strategy formulation in Ethiopian comprehensive universities remains partially institutionalized and not sufficiently embedded in

institutional strategic decision-making. Although universities generally demonstrate the capacity to articulate institutional missions through structured procedures, the broader analytical components of strategy formulation such as defining clear strategic goals, developing alternative strategies, and selecting feasible strategic options are not systematically integrated into the strategy development process. This indicates that strategy formulation is often implemented as a procedural requirement aligned with national policy frameworks rather than as a rigorous analytical process that guides institutional direction and competitiveness. In addition, limitations in operational planning suggest that universities face challenges in translating strategic intentions into coherent, prioritized, and adequately resourced action plans. These conditions highlight the need to strengthen institutional analytical capacity, coordination mechanisms, and strategic autonomy. Therefore, the study underscores that effective strategy formulation constitutes a critical managerial capability for universities, and its systematic institutionalization is essential for improving organizational efficiency, enhancing institutional effectiveness, and enabling Ethiopian comprehensive universities to respond strategically to the evolving demands of the higher education environment.

Strategy Communication: The study concludes that strategy communication in Ethiopian comprehensive universities is largely formal and hierarchical, relying primarily on traditional mechanisms such as reports, letters, and meetings to disseminate strategic information across institutional levels. While these established channels provide structured means for transmitting strategic directives and maintaining administrative coordination, they largely reflect a top-down communication approach that emphasizes information delivery rather than fostering broad institutional dialogue and shared understanding of strategic priorities. At the same time, the limited utilization of digital communication platforms indicates that universities have yet to fully leverage technological tools capable of enhancing the efficiency, transparency, and responsiveness of strategy communication processes. Institutional constraints related to technological infrastructure, digital literacy, and the absence of supportive communication policies further limit the integration of modern communication systems. Consequently, the study underscores the need for universities to strengthen strategy communication by promoting more interactive, inclusive, and technology-supported communication practices, which can enhance

institutional alignment, improve transparency, and facilitate more effective implementation of strategic management initiatives.

Approaches to Strategy Development: The study concludes that strategy development in Ethiopian comprehensive universities is predominantly Top–down, with senior leadership and national policy directives driving the formulation of institutional strategies. While this approach ensures alignment with Ministry of Education priorities, promotes policy coherence, and facilitates coordinated decision-making, it limits the participation of lower-level units and operational departments, reducing opportunities for context-specific innovation, shared ownership, and institutional commitment. The minimal application of bottom–up or participatory approaches highlights a governance structure that prioritizes hierarchical control over inclusive engagement, suggesting that universities may not fully leverage the insights, expertise, and needs of staff and other stakeholders. Consequently, the findings underscore the need to strengthen bottom-up mechanisms and participatory processes in strategy development to enhance institutional responsiveness, foster broader commitment to strategic goals, and improve overall organizational effectiveness.

Strategy Implementation: The study concludes that strategy implementation in Ethiopian comprehensive universities is moderately established but critically constrained, representing a core challenge in translating strategic plans into tangible institutional outcomes. Although existing structures, policies, and resource allocation provide a baseline for operationalizing strategies, centralized leadership, limited delegation of authority, weak institutional restructuring, minimal employee reward systems, and inconsistent change management collectively hinder the effective execution of strategic initiatives. These constraints not only reduce staff motivation and engagement but also impede the flexibility and responsiveness required to adapt strategies to institutional and environmental demands. Despite these operational limitations, the SEM results demonstrate that effective strategy implementation has a significant positive impact on both institutional efficiency and effectiveness, underscoring its centrality to organizational performance. Consequently, the findings highlight that strengthening all dimensions of strategy implementation including authority, structure, policies, rewards, resources, and change management is essential for ensuring that strategic intentions are translated into meaningful performance improvements and sustainable institutional development.

Strategic Efficiency and Effectiveness: The study concludes that strategic efficiency and effectiveness in Ethiopian comprehensive universities are generally weak to moderately developed, highlighting significant gaps between strategic intentions and operational outcomes. While leaders' and staff capabilities and community services demonstrate moderate performance, key strategic areas including education quality improvement, governance, resource allocation, technology utilization, partnership expansion, internationalization, and income generation remain inadequately implemented, constraining the overall effectiveness of strategic initiatives. Despite these weaknesses, the analysis confirms that these parameters collectively exert a significant influence on institutional performance, highlighting that leaders' and staff capabilities, education quality, governance, resource management, stakeholder involvement, and academic quality are central determinants of strategic success. This underscores a substantial latent potential: if universities strengthen the practical implementation of weaker strategic dimensions and address operational and resource-related constraints, they can substantially enhance both efficiency and effectiveness, achieving more robust, sustainable, and institution-wide strategic outcomes. These findings underscore a substantial latent potential: if implementation gaps are addressed, universities can significantly improve institutional performance and achieve more coherent, sustainable, and impactful strategic outcomes.

Critical success factors impacting strategy implementation: The study concludes that the successful implementation of strategies in Ethiopian comprehensive universities is predominantly determined by four core critical success factors (CSFs): top management commitment and strategic leadership, adequate resource allocation, staff training and career development, and effective communication mechanisms. These factors collectively form the foundation for operationalizing strategic plans, ensuring alignment between institutional priorities and actionable initiatives. While other factors such as employee and stakeholder involvement, continuous improvement, rewards, and customer satisfaction play supportive roles, their effectiveness largely depends on the strength and integration of the primary CSFs. The findings highlight that without deliberate identification, prioritization, and management of both core and supporting CSFs, strategy implementation remains constrained, limiting the translation of strategic intentions into measurable institutional outcomes. Therefore, universities must adopt

a proactive and systematic approach to managing these critical factors to enhance the efficiency, effectiveness, and sustainability of strategic initiatives.

Monitoring and Evaluation: The study concludes that monitoring and evaluation (M&E) practices in Ethiopian comprehensive universities are partially institutionalized and operationally constrained, representing a critical lever for enhancing institutional performance that is not yet fully realized. While certain practices such as developing performance indicators, collecting reports, and conducting evaluation meetings demonstrate moderate application and contribute positively to efficiency and effectiveness, core dimensions of M&E, including stakeholder involvement and the implementation of corrective actions, remain weak, limiting the transformative potential of these practices. The findings reveal that inconsistent application, inadequate training, weak coordination, and unclear accountability structures hinder the ability of M&E to function as a strategic tool for evidence-based decision-making. Nevertheless, the structural equation modeling results confirm that M&E has a statistically significant and positive impact on both efficiency and effectiveness, underscoring its central role in institutional performance. Consequently, the study underscores that strengthening stakeholder engagement, standardizing performance indicators, and establishing robust corrective and accountability mechanisms are essential to institutionalize M&E as a strategic instrument capable of driving sustained improvement, operational excellence, and the effective realization of university objectives.

Overall SM Practices on Organizational Performance: The study concludes that Strategic Management Practices (SMP) exert a strong and statistically significant influence on the overall performance of Ethiopian comprehensive universities**,** highlighting their central role in shaping institutional outcomes. Modeled as an integrated construct comprising environmental scanning, strategy formulation, strategy implementation, and monitoring & evaluation, SM practices significantly enhances both institutional efficiency and effectiveness, demonstrating that improvements across these components translate directly into better operational performance and more effective achievement of strategic objectives. The findings provide robust empirical evidence that well-coordinated, systematically implemented, and contextually adapted strategic management practices are essential for universities to optimize resource utilization, strengthen governance, and foster sustainable institutional development. Consequently, the study

underscores that investing in the comprehensive adoption and continuous enhancement of SMP is critical for advancing organizational performance and achieving long-term strategic goals in the higher education sector.

Major factors affecting SM Practices: The study concludes that the effectiveness and efficiency of strategic management practices in Ethiopian comprehensive universities are significantly constrained by a combination of internal and external factors. Internally, limitations such as insufficient top management commitment, weak leadership, inadequate managerial skills, misaligned organizational structures, limited resource allocation, poor reward systems, ineffective communication, and minimal stakeholder involvement impede the successful formulation and implementation of strategies. Externally, universities face heightened challenges from environmental uncertainty, economic instability, inflation, rapid policy changes, and insufficient technological adoption, which compound internal weaknesses and create a complex decision-making context. Collectively, these findings highlight that without strong adaptive leadership, strategic foresight, and systemic alignment, strategic management practices cannot realize their intended objectives, leaving universities underprepared to respond effectively to dynamic higher education demands. This underscores the critical need for both institutional capacity-building and responsive strategies that address internal deficiencies and external pressures to enhance overall organizational performance.

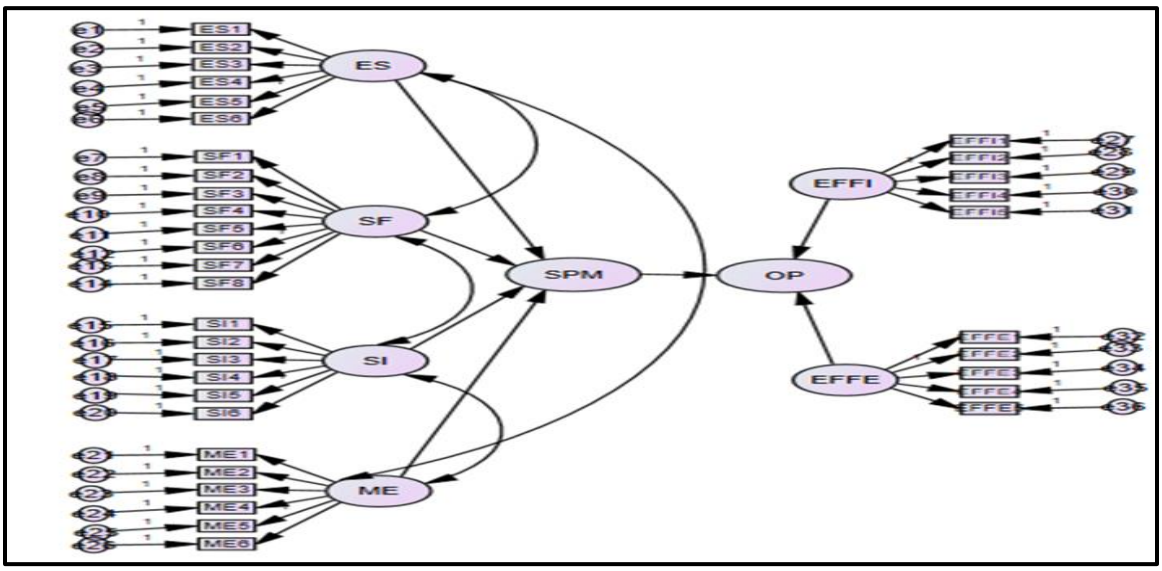
Institutional Response to Mitigate the Challenges: The study concludes that addressing the challenges hindering strategic management in Ethiopian comprehensive universities requires a comprehensive and coordinated institutional response. Effective measures include enhancing accountability, strengthening governance, ensuring institutional autonomy, improving stakeholder engagement, fostering clear and effective communication, aligning organizational structures, developing performance indicators, allocating adequate resources, investing in staff training and career development, implementing performance-based funding, and cultivating a shared aspirational vision. These interventions collectively create the conditions necessary for universities to overcome operational bottlenecks, strengthen strategic decision-making, and enhance both efficiency and effectiveness. The findings underscore that a multifaceted and integrated approach combining governance, capacity building, resource optimization, and

participatory practices is essential to institutionalize strategic management and ensure sustainable performance improvements in higher education institutions.

5.3 Propose Structural Model for SM practices in higher education institutions.

The proposed structural model conceptualizes the dynamic relationships among the four strategic management dimensions (environmental scanning, strategy formulation, strategy implementation, and monitoring & evaluation) to illustrate their collective impact on organizational performance, providing a practical and theoretically grounded framework for enhancing strategic management in higher education institutions.

Figure 5.1. Proposed structural Model for SM practices in HEIs in Ethiopia



Source: Survey Data computed with SPSS AMOS (2026)

The proposed structural model of Strategic Management Practices (SMP) in higher education institutions presents a comprehensive framework integrating four key dimensions Environmental Scanning (ES), Strategy Formulation (SF), Strategy Implementation (SI), and Monitoring & Evaluation (M&E) and their collective influence on Organizational Performance (OP), conceptualized through efficiency (EFFI) and effectiveness (EFFE**)**. This model synthesizes the empirical findings of the study, reflecting how these strategic dimensions interact to enhance institutional performance and sustainability.

In this model, *Environmental Scanning* constitutes the foundational dimension of the model, enabling institutions to systematically gather and interpret internal and external intelligence. The study demonstrates that robust environmental scanning allows HEIs to anticipate challenges, identify emerging opportunities, and align strategic responses with evolving educational, technological, socio-economic, and regulatory landscapes. Institutions that excel in ES cultivate a proactive culture, reduce strategic uncertainty, and strengthen their capacity to make evidence-based decisions an essential prerequisite for high-performing universities. *Strategy Formulation* translates insights from ES into coherent, actionable strategic plans. This dimension encompasses defining institutional vision and mission alignment, prioritizing initiatives, allocating resources judiciously, and designing adaptive policies. The study shows that effective SF bridges the gap between understanding the environment and executing strategies, ensuring that institutional goals are both ambitious and achievable. SF also establishes a roadmap that guides decision-making, aligns stakeholders, and embeds strategic coherence across the university. *Strategy Implementation* operationalizes formulated strategies, transforming plans into tangible outcomes. It emphasizes leadership effectiveness, organizational coordination, resource mobilization, and staff engagement. Findings from the study confirm that without disciplined implementation; even the well-conceived strategies fail to generate impact. SI directly drives organizational performance by ensuring that strategic objectives are executed efficiently, institutional priorities are aligned across departments, and resources are utilized optimally. *Monitoring & Evaluation* completes the cycle, embedding mechanisms for continuous feedback, accountability, and adaptive learning, ensuring that strategies remain responsive to evolving internal and external conditions. This dimension assesses progress, measures outcomes against objectives, and enables adaptive decision-making. The study highlights that effective M&E ensures accountability, promotes continuous improvement, and institutionalizes learning, allowing universities to refine strategies in response to emerging challenges and evolving stakeholder expectations.

Organizational Performance represented by efficiency and effectiveness, reflects the cumulative outcome of the four strategic dimensions. The study establishes that when ES, SF, SI, and M&E function in an integrated and synergistic manner, they significantly enhance operational productivity, service quality, stakeholder satisfaction, and the overall institutional excellence of

HEIs. This confirms a robust, evidence-based link between strategic management practices and superior organizational outcomes.

In conclusion, the proposed structural model provides a theoretically grounded and empirically validated framework for understanding and enhancing SMP in higher education institutions. It emphasizes the interdependence of scanning, planning, execution, and evaluation, offering a practical roadmap for institutions to achieve strategic alignment, sustainable performance, and excellence. By presenting a clear, integrated framework, this model not only advances academic understanding but also offers actionable guidance for policy-makers and university leaders.

Building on the key findings and conclusions of this study, a proposed structural model of strategic management practices in higher education institutions is presented. The model integrates the relationships identified among leadership, governance, resource allocation, stakeholder engagement, and organizational performance, offering a conceptual framework that reflects the empirical evidence gathered. By visually and theoretically mapping these interconnections, the model serves as a foundation for the subsequent recommendations and practical implications, ensuring that the suggested strategies are directly informed by the study's results.

5.4. Recommendations

Based on the findings and conclusions of this study, it is evident that strategic efficiency and effectiveness in comprehensive universities remain inconsistent across key institutional parameters. Critical gaps were observed in governance, resource utilization, stakeholder engagement, strategy formulation, quality of education, and institutional response mechanisms. To address these gaps, the following recommendations are proposed, organized thematically across environmental scanning, strategy formulation, strategic implementation , monitoring & evaluation, and overall Strategic Management Practices' impact on organizational performance.

Theme 1: Environmental Scanning

- It is recommended that comprehensive universities strengthen systematic environmental scanning through institutionalizing regular environmental scanning mechanisms through

annual SWOT analyses, stakeholder consultations, and periodic assessment of political, economic, technological, and educational trends affecting university performance. These activities should be integrated into the universities' planning cycle and monitored by planning and budgeting directorates on a semester or annual basis. Strengthening systematic environmental scanning will support proactive and evidence-based strategic development aligned with institutional missions, societal demands, and emerging challenges.

- It is recommended that comprehensive universities regularly assess stakeholder and student needs using surveys, consultations, and feedback mechanisms. This ensures that strategies are responsive, participatory, and aligned with institutional priorities, fostering ownership and engagement.

Theme 2: Strategy Formulation

- It is recommended that comprehensive universities institutionalize strategy formulation as a structured and evidence-based analytical process rather than a procedural requirement. This should involve mandatory environmental and institutional analysis, development of multiple strategic alternatives, and systematic evaluation of options using explicit criteria such as feasibility, resource availability, risk, and strategic alignment. Furthermore, universities should strengthen governance mechanisms that ensure documented justification of strategic choices and introduce internal and, where feasible, external review processes to enhance the rigor, transparency, and credibility of strategic decision-making.
- It is recommended that comprehensive universities strengthen strategy communication by adopting a hybrid system that integrates formal communication channels with digital platforms, supported by clear institutional policies and improved digital literacy. It is further recommended that universities promote interactive and participatory communication mechanisms to facilitate dialogue and feedback among stakeholders, while investing in technological infrastructure, continuous capacity-building, and regular monitoring of communication practices to enhance transparency clarity, alignment, stakeholder's engagement and the overall effectiveness of strategic management initiatives.
- It is recommended that comprehensive universities adopt a more balanced and participatory approach to strategy development by complementing existing top–down directives with bottom–up engagement mechanisms. Universities should actively involve academic units,

administrative staff, and other key stakeholders in the strategy formulation process to incorporate diverse perspectives and context-specific insights. Strengthening participatory governance structures will enhance shared ownership, institutional commitment, and the practical relevance of strategic plans, thereby improving overall organizational effectiveness and responsiveness to emerging challenges.

Theme 3: Strategic Implementation

- It is recommended that Ethiopian comprehensive universities strengthen strategy implementation by enhancing institutional structures and clearly defining roles and responsibilities, decentralizing authority to improve decision-making efficiency, and improving resource allocation to support effective execution of strategic plans. In addition, universities should institutionalize/establish a transparent performance-based employee incentive and reward system that links individual and unit-level performance to strategic objectives. This includes recognizing and rewarding achievement of key performance targets through both financial and non-financial incentives such as promotion opportunities, recognition mechanisms, professional development support, and institutional awards. Such an integrated approach is expected to increase accountability, motivation, and alignment of staff efforts with strategic priorities. Strengthening these dimensions will ensure that strategic intentions translate into tangible improvements in institutional efficiency, effectiveness, and sustainable organizational performance.
- It is recommended that the Ministry of Education institutionalize a national policy requiring mandatory competency-based executive education and continuous professional development for all university leaders, in line with the Education Development Roadmap, to address leadership skill gaps and strengthen leadership professionalism across Ethiopian comprehensive universities.
- It is recommended that comprehensive universities prioritize quality of education by strengthening curriculum design, teaching methods, assessment systems, and faculty development programs. This ensures that core academic outcomes meet institutional and societal expectations.
- It is recommended that comprehensive universities enhance research productivity and community engagement, integrating these into strategic plans, performance monitoring, and

incentive systems. This strengthens alignment with institutional goals and maximizes societal impact.

- It is recommended that comprehensive universities strengthen governance through specific reforms such as establishing performance-based and results-based management systems, empowering middle-level leadership with delegated decision-making authority, and creating dedicated strategy implementation and monitoring units to track critical success factors and ensure accountability. These reforms should be supported by program-based budgeting, transparent digital communication systems, and strengthened top management accountability to improve strategic implementation efficiency and effectiveness.
- It is recommended that comprehensive universities expand partnerships, promote internationalization, and leverage digital technology to support institutional growth, global visibility, and operational efficiency. Collaborative programs, global linkages, and digital tools should be institutionalized to strengthen strategic implementation.

Theme 4: Monitoring & Evaluation

- It is recommended that Ethiopian comprehensive universities institutionalize robust monitoring and evaluation (M&E) systems through standardized performance indicators, clear reporting frameworks, and formal evaluation procedures. Universities should also strengthen stakeholder engagement and establish effective corrective action mechanisms to ensure that evaluation findings lead to tangible improvements in institutional performance and strategic decision-making. Integrating monitoring and evaluation with accountability systems, institutional governance, and strategic planning, together with sustained capacity-building, will enhance evidence-based decision-making and support continuous and sustainable organizational improvement.

- It is recommended that comprehensive universities address systemic barriers to strategy implementation, including weak governance, inadequate resources, and poor coordination. Institutional reforms, targeted policies, and process reviews should be implemented to ensure smoother strategy execution.
- It is recommended that MoE & comprehensive universities enhance academic, financial, and administrative autonomy to a substantial degree within the national regulatory framework by

expanding delegated decision-making authority to institutional and departmental levels. This should be operationalized through mechanisms such as performance-based funding, cost sharing or student loan, decentralized procurement systems, strengthened internal governance charters, and KPI-based accountability structures involving stakeholder participation, alongside continuous staff training and career development to support effective strategic management implementation.

Theme 5: Overall Strategic Management Practices on Organizational Performance

- It is recommended that comprehensive universities align all strategic management practices with institutional performance goals. Operational plans, resource allocation, and monitoring systems should be integrated with strategic objectives to promote efficiency, effectiveness, and sustainable academic and societal outcomes.

5.5. Future Research implications/Limitations

The findings of this study offer a foundation for several avenues of future research. First, subsequent studies could expand the scope by including a broader range of higher education institutions, such as specialized and technical universities, to examine whether strategic management practices differ across institutional types to identify contextual variations. Second, longitudinal research is recommended to capture the dynamic nature of SM practice and its long-term impact on institutional efficiency, effectiveness, and societal outcomes. Third, future studies could explore the integration of underutilized strategic tools, such as scenario analysis, core competence analysis, and cost-benefit analysis, to assess their contribution to strategy effectiveness. Additionally, investigating the role of external environmental factors including policy shifts, technological disruption, and socio-economic changes can deepen understanding of contextual influences on strategic decision-making.

Finally, qualitative or mixed-methods approaches that engage multiple stakeholders, including faculty, administrators, and students, can provide richer insights into the participatory dimensions of strategic management and uncover nuanced barriers and enablers to effective implementation. These research directions can help refine theoretical frameworks, inform evidence-based policy, and guide universities in developing more adaptive, efficient, and sustainable strategic management systems.

5.6 Implications

Consequently, the following research implications are proposed to be addressed shortly by different academics/researchers of educational leadership and/or management.

5.6.1. Theoretical Implications

This study contributes to the strategic management literature by extending the application of strategic fit and resource-based theories within higher education contexts. It demonstrates how evidence-based strategy formulation, environmental scanning, and participatory decision-making influence institutional efficiency and effectiveness. By integrating multiple strategic tools and assessing their impact on academic and community outcomes, the study delivers a framework for comprehending the alignment among institutional resources, capabilities, and strategic objectives. Furthermore, it highlights gaps in existing models such as underutilized tools like scenario analysis and core competence assessment offering a basis for refining theoretical frameworks that account for both internal capacities and external environmental complexities.

5.6.2 Practical Implications

For practitioners, the study underscores the importance of adopting integrated, systematic, and evidence-driven strategic management processes. Universities are encouraged to institutionalize robust monitoring and evaluation systems, leverage digital platforms for resource optimization, and adopt participatory approaches, encourage dynamic leadership and top management commitment, institutional autonomy, and accountability to strategy development to enhance effectiveness. The findings suggest that strategic tools commonly employed (e.g., SWOT, benchmarking, vision-mission analysis) should be complemented by advanced methods, including PESTEL analysis, scenario analysis, stakeholder and cost-benefit analyses, to improve decision-making, resource allocation, and the attainment of academic and societal goals.

5.6.3. Managerial Implications

From a managerial perspective, the study highlights the critical role of strategic leadership and governance in shaping institutional performance. University managers are advised to: strengthen strategic planning and implementation capabilities through capacity building and staff

development programs, prioritize efficient resource mobilization and allocation aligned with institutional missions, nurture a culture of accountability and continuous improvement by regularly monitoring strategic outcomes, engage stakeholders actively to ensure alignment between institutional strategies and community needs. Collectively, these managerial actions can enhance operational efficiency, effectiveness, and the long-term sustainability of universities in fulfilling their academic and societal mandates.

References

Aaltonen, P. and Ikavaiko, H. (2002). Implementing strategies successfully; integrated manufacturing systems. 13. (6). 415-418. https://doi.org/10.1108/09576060210436669

Abad-Segura, E., & González-Zamar, M. D. (2021). Sustainable economic development in higher education institutions: A global analysis within the SDGs framework. *Journal of Cleaner Production*, *294*, 126133. https://doi.org/10.1016/j.jclepro.2021.126133

Abalaka, A. I. (2025). *Exploring The Challenges On The Path To Successful Strategy Implementation In An Academic Unit Of A Mid-Size Private University In The Mid-West United States* (Doctoral dissertation, Ashland University).

Abd Elkader, A. E., Adam, S. M., & Abdrabou, H. M.(2015). Training Strategies and Its Effect on Nursing Teachers' Emotional Intelligence.7, (3), 357-368. www.noveltyjournals.com

Adane, M. (2021). *ASSESSMENT OF STRATEGIC MANAGEMENT PRACTICES; THE CASE OF ETHIOPIAN ROADS AUTHORITY* (Doctoral dissertation, ST. MARY'S UNIVERSITY). http://hdl.handle.net/123456789/6072

Aguilar, F. J. (1967). *Scanning the business environment*. Macmillan.

Aguilera, R. V., Judge, W. Q., & Terjesen, S. A. (2019). Corporate governance deviance. *Academy of Management Review, 44*(1), 87–109.

Ahmad, N., Alias, F. A., & Razak, N. A. A. (2023). Understanding population and sample in research: Key concepts for valid conclusions. *Sigcs: E-Learning*, *6*, 19-24. https://appspenang.uitm.edu.my/sigcs/

Aithal, P. S. (2018). Strategic Management Research in India: Contribution of Top Business Schools during last 5 Years–A Critical Study. *International Journal of Advanced Trends in Engineering and Technology*, *3*(1), 133-145. http://www.dvpublication.com/

Åkerfeldt, A., & Boistrup, L. B. (2021). *Design and research: ethical considerations*. In *Designs for Research, Teaching and Learning* (pp. 48-60). Routledge. http://taylorandfrancis.com/

Akram, R., Ibrahim, R. L., Wang, Z., Adebayo, T. S., & Irfan, M. (2023). Neutralizing the surging emissions amidst natural resource dependence, eco-innovation, and green energy in G7 countries: Insights for global environmental sustainability. *Journal of Environmental Management*, *344*, 118560. https://doi.org/10.1016/j.jenvman.2023.118560

Akyıldız, S. T., & Ahmed, K. H. (2021). An overview of qualitative research and focus group discussion. *International Journal of Academic Research in Education*, *7*(1), 1-15. https://doi.org/10.17985/ijare.866762

Alharty, A. H., Rashid, H. Pagliari, R., & Khan, F. (2017).Identification of strategy implementation influencing factors and their effects on the performance.8(1),34-44. http://ijbssnet.com/journal/index/3673

Ali & Mohan (2021). Strategic Management in Ethiopian Public Higher Education Institutions: Assessing the Practices and Challenges.No.67. December, 2021.

Alison, L.van den Heuvel, C., & Power, N. (2014). Coping with uncertainty: Police strategies for resilient decision-making and action implementation. *Cognition, Technology & Work*, *16*(1), 25-45. doi 10.1007/s10111-012-0241-8

Alkandi, I. G., Khan, M. A., Fallatah, M., Alabdulhadi, A., Alanizan, S., & Alharbi, J.(2023). The impact of incentive and reward systems on employee performance in the Saudi primary, secondary, and tertiary industrial sectors: A mediating influence of employee job satisfaction. *Sustainability*, *15*(4), 3415. https://doi.org/10.3390/su15043415

Al-Sharhan, S. Al-Hunaiyyan, A., Alhajri, R., & Al-Huwail, N. (2019).Utilization of learning management system (LMS) among instructors and students. In *Advances in electronics engineering: Proceedings of the ICCEE 2019, Kuala Lumpur, Malaysia* (pp. 15-23). Springer . DOI. https://doi.org/10.1007/978-981-15-1289-6_2.

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). *Trends in global higher education: Tracking an academic revolution*. UNESCO

Amirrudin, M., Nasution, K., & Supahar, S. (2021). Effect of variability on Cronbach alpha reliability in research practice. *Jurnal Matematika, Statistika Komputasi*, *17*(2), 223-230.

Amjad, Z & Sabri, P. S. U., Ilyas, M., (2013). The impact of organizational culture on commitment of Teachers in Private Sector of Higher Education. *Pakistan Journal of Social and Clinical Psychology*, *11*(2), 69. gcu.edu.pk

Amuna, Y. M. A., Al Shobaki, M. J., & Naser, S. S. A. (2017). Strategic environmental scanning: An approach for crises management. *International Journal of Information Technology and Electrical Engineering*, *6*(3), 28-34. https://hal.science/hal-01567731v1

An, J. Y., Yom, Y. H., & Ruggiero, J. S. (2011). Organizational culture, quality of work life, and organizational effectiveness in Korean university hospitals. *Journal of transcultural nursing*, *22*(1), 22-30. https://doi.org/10.1177/1043659609360849

Andrews, K. R. (2017). What strategy is. *Historical Evolution of Strategic Management, Volumes I and II*, *1*, 15. https://doi.org/10.4324/9781315253336

Andualem, (2019).Challenges of strategic plan Development and implementation in Secondary schools of Gulele sub city Government, Addis Ababa, Ethiopia.

Aniceto, K., Nguri, J. W., Eduarda, M., Shimizu, E., & Akinyemi, A. (2025). *Effective Strategic Management Practices in Finance*. AJPO Journals USA LLC.

Ansoff, H. I. (1965). *Corporate strategy*. McGraw-Hill.

Ansoff, H. I. (1988). *The new corporate strategy*. John Wiley & Sons.

Antia, J. M., & Cuthbert, R. E. (1976). Critical success factors in polytechnic performance. *Educational Administration*, *5*(1), 14-36.

Anvari, R., Amin, S.M., Seliman, S., Ahmad, U.N., and Garmsari, M. (2011): The relationship between strategic compensation practices and affective organizational commitment, Interdisciplinary Journal of Research in Business, 1 (2), 44 055.

Arias-Coello, A., Simon-Martin, J., & Gonzalo Sanchez-Molero, J. L. (2020). Mission statements in Spanish universities. Studies in Higher Education, 45(2), 299–311. https://doi.org/10.1080/03075079.2018.1512569

Armstrong, M. (2012). *Armstrong's handbook of human resource management practice* (12th ed.). Kogan Page.

Armstrong, M. (2021). *Armstrong's handbook of strategic human resource management*. Kogan Page.

Asfaw, F. M. (2012). Patterns of inequality in higher education: the case of students' field choice. *International Journal of Learning and Intellectual Capital*, *18*(4), 421-437.

Asgedom, A., & Hagos, T. (2015). Governance Reforms in Higher Education of Ethiopia: The Case of Autonomy and Accountability in Addis Ababa University. Ethiopian Journal of Development Research, 37(1), 1-40. https://doi.org/10.4314/ejdr.v37i1.

Ashcroft, K., & Rayner, P. (2011). *Higher education in Development*: lessons from sub-Saharan Africa. IAP. books.google.com

Badawy, M., Abd El-Aziz, A. & Hefny, H. (2018). Exploring and measuring the key performance indicators in higher education institutions. *International Journal of Intelligent Computing and Information Sciences*, *18*(1), 37-47.

Baltabayeva, Z. B., Sautieva, F. B., Skorobogatova, A. G., & Mamatelashvili, O. V. (2020). The impact of success factors on the strategic management in an educational complex. *Amazonia Investiga*, *9*(29), 336-346. https://doi.org/10.34069/AI/2020.29.05.38

Barber, K., Kopf, and D. A., & Peltier, J. W. (2023). The effects of profit-maximization on ethical climate in higher education: a qualitative study utilizing neutralization theory. *Journal of Marketing for Higher Education*, 1-20.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.

Barney, J. B. & Clark, D. N. (2007). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford University Press

Barney, J. B. (2021). *Gaining and sustaining competitive advantage* (6th ed.). Pearson.

Bazargan, A. & Farasatkhah, M. (2019). Monitoring and evaluation in higher education. *Tehran: Samt.{Persian}*.

Beer, M., & Eisenstat, R. A. (2000). The silent killers of strategy implementation and learning. *Sloan Management Review, 41*(4), 29–40.

Benjamin, R., & Carroll, S. J. (1997). Breaking the Social Contract: The Fiscal Crisis in California Higher Education.

Berisha Qehaja, A., Kutllovci, E., & Shiroka Pula, J. (2017). Strategic Management tools and techniques Usage: A Qualitative review. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, *65*(2). https://doi.org/10.11118/actaun201765020585

Bess, J. L., Johnstone, D. B., & Dee, J. R. (2023). *Understanding college and university organization: Theories for effective policy and practice: Volume II—Dynamics of the system*. Routledge. https://doi.org/10.4324/9781003448457

Bieler, A., & McKenzie, M. (2017). Strategic planning for sustainability in Canadian higher education. Sustainability, 9(2), 161. https://doi.org/10.3390/su9020161

Birinci & Eren, A. (2013). Prospective teachers' perceptions of instrumentality, boredom coping strategies, and four aspects of engagement. *Teaching Education*, *24*(3), 302-326.

Bogdan, R.C. & Biklen, S.K. (2007). *Qualitative Research for Education*: An introduction to theories and methods (5th ^{Ed}.). Boston: Pearson Education

Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2021). Emergency remote teaching in higher education: Mapping the first global online semester. *International Journal of Educational Technology in Higher Education, 18*, 50.

Bose, L. (2018). *The career hopscotch: Understanding the relationship between knowledge, competencies, skill-acquisition and voluntary turnover* (Doctoral dissertation, UNSW Sydney). http://hdl.handle.net/1959.4/60995

Boulding, K. E. (1956). General systems theory the skeleton of science. *Management science*, *2*(3), 197-208. https://doi.org/10.1287/mnsc.2.3.197

Bowling, N. A., Huang, J. L., Brower, C. K., & Bragg, C. B. (2023). The quick and the careless: The construct validity of page time as a measure of insufficient effort responding to surveys. *Organizational Research Methods*, *26*(2), 323-352.

Brezzi, M., González, S., Nguyen, D., & Prats, M. (2021). An updated OECD framework on drivers of trust in public institutions to meet current and future challenges. *OECD working papers on public governance*, 48(1), 1-60. http://www.oecd.org/termsandconditions

Brown, (2006).Reflexivity in the research process: Psychoanalytic observations. *International Journal of Social Research Methodology*, *9*(3), 181-197.

Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations*: A guide to strengthening and sustaining organizational achievement. John Wiley & Sons

Buchan, R., & Holland, M. (2021). *Transformative incrementalism*: Implications for transformative planning practice. In *Transformative Planning* (pp. 15-28). Routledge.

Burnes, B. (2020). The origins of Lewin's three-step model of change. *The Journal of Applied Behavioral Science*, *56*(1), 32-59.

Cameron, K. S. (1981). Domains of organizational effectiveness in colleges and universities. *Academy of Management Journal*, *24*(1), 25-47.

Cameron. & Quinn, D. M., Swain, N., & Vella-Brodrick, D. A. (2015). How 'other people matter' in a classroom-based strengths intervention: Exploring interpersonal strategies and classroom outcomes. *The Journal of Positive Psychology*, *10*(1), 77-89.

Candido, C. J. F., & Santos, S. P. (2019). Strategy implementation: What is the failure rate? *Journal of Management & Organization, 25*(2), 237–262.

Castañer, X., & Yu, H. (2017). The role of middle and top managers in the strategy process. In *Handbook of Middle Management Strategy Process Research* (pp. 13-32). Edward Elgar Publishing. https://doi.org/10.4337/9781783473250.00008

Castellano, L. G. (2024). *Sustainable Education Is Online Education: Designing and Instructing an Engaging and Effective Online Music Course* (Doctoral dissertation, Teachers College, Columbia University). search.proquest.com

Chan, W. W. (2004). International cooperation in higher education: Theory and practice. *Journal of studies in International Education*, *8*(1), 32-55.

Chandler, A. D. (1962). *Strategy and structure: Chapters in the history of the American industrial enterprise*. MIT Press.

Cheng, W. H., Kadir, K. A., & Bohari, A. M. (2014). The strategic planning of SMEs in Malaysia: A view of External Environmental Scanning *International Journal of Business & Society*, *15*(3). ijbs.unimas.my

Cheng, Y. C. (2015). *Quality assurance in education: Internal, interface, and future*. Springer.

Child, J. (1997). Strategic choice in the analysis of action, structure and organizations. *Organization Studies, 18*(1), 43–76.

Chimakati, F. M., & Odiyo, W. (2023). The Role of HR and Line Managers in Policy Implementation: A Collaborative Approach to Efficiency and Effectiveness. *Journal of Human Resource & Leadership, 7*(6), 84-91. https://doi.org/10.53819/81018102t30128.

Chiuri, B. W. (2015). *Challenges of strategy implementation in higher education institutions in Kenya* (Doctoral dissertation, JKUAT).

Choo, C. W. (1999). *The art of scanning the environment*. Bulletin of the American Society for Information Science and Technology, 25(3), 13–19.

Christensen, C. M., & Eyring, H. J. (2011). *The innovative university*. Jossey-Bass.

Clark, B. R. (1983). *The higher education system: Academic organization in cross-national perspective*. University of California Press

Clegg, S., & McAuley, J. (2005). Conceptualizing middle management in higher education: A multifaceted discourse. *Journal of Higher Education Policy and Management*, *27*, 19-34.

Cooper, D. J., & Hamman, J. R. (2021). Leadership and Delegation of Authority. In *Handbook of Labor, Human Resources and Population Economics* (pp. 1-25). Cham: Springer International Publishing.

Cortés, J. D., Rivera, L., & Carbonelld, K. B. (2022). Mission statements in universities: Readability and performance. *European research on management and business economics*, *28*(2), 100183. https://doi.org/10.1016/j.iedeen.2021.100183

Cosenz, F., & Bianchi, C. (2013). Designing performance management systems in academic institutions: (ASPA) A dynamic performance management view. In *ASPA conference*.

Costa, J. (1997). *A study of strategic planning and environmental scanning in the multiunit Portuguese hotel sector*. University of Surrey (United Kingdom)

Creswell, A. C., J., Plano Clark, V. L., Smith, K. C., & Meissner, H. I. (2012). Best practices in mixed methods for quality of life research. *21*, 377-380.

Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of mixed methods research*, *3*(2), 95-108. https://doi.org/10.1177/1558689808330883

CSA, (2023). The Federal Democratic Republic of Ethiopia, Ethiopia Statistics Service Suvey report, Unpublished, Addis Ababa, Ethiopia

Daft, R. L. (2016). Organization Theory &Design. South-Western College

Daft, R. L. (2021). *Organization theory and design* (13th ed.). Cengage Learning.

David Teece, D. J. (2023). *Dynamic capabilities and strategic management: A capabilities perspective*. *California Management Review.*

David, F. R. (2011). *Strategic management: Concepts and cases* (13th ed.). Pearson.

David, F. R., David, F. R., & David, M. E. (2020). *Strategic management: Concepts and cases* (17th ed.). Pearson

Davies, C., & Fisher, M. (2018). Understanding research paradigms. *Journal of the Australasian Rehabilitation Nurses Association*, *21*(3), 21-25.

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review, 22*(1), 20–47.

De Wit, H. (2024). Internationalization in and of higher education: critical reflections on its conceptual evolution. In *Internationalization in Higher Education and Research: Perspectives, Obstacles, Alternatives* (pp.17-31). Cham: Springer International Publishing.

De-Flander (2008). Closing the strategy execution gap in the public sector. *International Journal of Public Leadership*, *14*(1), 6-32. https://doi.org/10.1108/IJPL-04-2016-0010

DeLuca, J. B., Mullins, M. M., Lyles, C. M., Crepaz, N., Kay, L., & Thadiparthi, S. (2008). Developing a comprehensive search strategy for evidence based systematic reviews.

Demie, A. N. (2020). *THE EFFECT OF STRATEGIC MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE AT AWASH INSURANCE COMPANY* (Doctoral dissertation, Jimma University).

Denis, H., & Gary, A. (2000). An empirical study of service quality implementation. *The Service Industries Journal*, *20*(2), 133-156.https://doi.org/10.1080/02642060000000024

Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of management review*, *21*(3), 619-654 https://doi.org/10.5465/amr.1996.9702100310

Dereb, A., & Getahun, D. A. (2024). Ethiopian public university leaders' understanding of strategic management: A critical path to sustainable institutional success. *Bahir Dar Journal of Education, 24*(2), 112–130.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited. *American Sociological Review, 48*(2), 147–160.

Dinberu, G. (2014). Assessment of Strategic Management Practices and Implementation: In The Case of Nib International Bank. DOI: 10.20956/jmsk.v17i2.11655.

Donaldson, L. (2001). *The contingency theory of organizations*. Sage.

Donker, A. S., De Boer, H., Kostons, D., Van Ewijk, C. D., & van der Werf, M. P. (2014). Effectiveness of learning strategy instruction on academic performance: A meta-analysis. *Educational Research Review, 11*, 1-26.

Donkoh, S., & Mensah, J. (2023). Application of triangulation in qualitative research. *Journal of Applied Biotechnology and Bioengineering*, *10*(1), 6-9. DOI: 10.15406/jabb.2023.10.00319

Dooris, M. J., Kelley, J. M., & Trainer, J. F. (2004). Strategic planning in higher education. *New Directions for Institutional Research, 2004*(123), 5-11. https://doi.org/10.1002/ir.115

Doran, G. T. (1981). There's a S.M.A.R.T. way to write management's goals. *Management Review*, 70(11), 35–36.

Doten-Snitker, K., Margherio, C. Litzler, E., Ingram, E., & Williams, J. (2021). Developing a shared vision for change: Moving toward inclusive empowerment. *Research in Higher Education, 62*, 206-229. https://doi.org/10.1007/s11162-020-09594-9

Dowson, M., & McInerney, D. M. (2003). What do students say about their motivational goals?: Towards a more complex and dynamic perspective on student motivation. *Contemporary educational psychology*, *28*(1), 91-113. https://doi.org/10.1016/S0361-476X (02)00010-3

Edamo, D. (2024). Strategic management approaches for improving educational quality and accountability in public universities. *Ethiopian Journal of Behavioral Studies and Social Sciences, 7*(1), 45–63.

Ederio, N. T., Inocian, E. P., Calaca, N. I., & Espiritu, J. G. M. (2023). Ethical research practices in educational institutions: A literature review. *International Journal of Current Science Research and Review, 6*(5), 2709-2724. DOI: 10.47191/ijcsrr/V6-i5-02

EFDRE, Federal Democratic Republic of Ethiopia (2023).The New Education and Training Policy and Its Implementation. Ministry of Education: Unpublished. Addis Ababa.

Elbanna, S., Andrews, R., & Pollanen, R. (2022). Strategic planning and implementation success in public organizations: The role of employee participation and leadership commitment. *Public Management Review, 24*(10), 1508–1529. https://doi.org/10.1080/14719037.2021.1885838

Enders, J., de Boer, H., & Weyer, E. (2019). Regulatory autonomy and performance-based governance in higher education: The changing balance between the state and universities. *Higher Education Policy, 32*(3), 399–418.

Esteban, Inga, E., Inga, J., Cárdenas, J. & Cárdenas, J. (2021). Planning and strategic management of higher education considering the vision of Latin America. *Education Sciences*, *11*(4), 188. https://doi.org/10.3390/educsci11040188

Evans, R., Weech-Maldonado, R., Burke, D., Grammas, M., Jablonski, R., & Mehta, T. (2020). Developing a strategic group typology for home health care agencies. *Home Health Care Management & Practice*, *32*(2), 87-94. https://doi.org/10.1177/1084822319882673

Fadzli Ahmad Tajuddin, A., & Zamberi Ahmad, S. (2013). Impact of environmental scanning on the organisational performance of local authorities in Malaysia. *Transforming Government: People, Process and Policy*, *7*(3), 342-363.

Fatkhurrokhman, M., Leksono, S. M., Deni, S., Ageng, R., Tirtayasa, I. N. R., & At, L. S. O. P. L. (2024). B. The Concept of Strategy. *AN UNDERGRADUATE THESIS*, (p22)

FDRE. (2019). *Higher Education Proclamation N0. 1152/2019*. Federal Negarit Gazeta, Addis Ababa: Berahn and Selam Printing Enterprise.

Ferlie, E., & Ongaro, E. (2022). *Strategic management in public services organizations: Concepts, schools and contemporary issues*. Routledge. taylorfrancis.com

Ferlie, E., Musselin, C., & Andresani, G. (2008). The new public management in universities; *Financial Accountability & Management*, 24(2), 101–120.

Figueron, O. (2015). The influences impacting staff turnover in higher education. *J. Mgmt. & Sustainability, 5*, (4),(pp. 86). http://dx.doi.org/10.5539/jms.v5n4p86

Fischer, H. E., Boone, W. J., & Neumann, K. (2023). *Quantitative research designs and approaches.* In *Handbook of research on science education* (pp. 28-59). Routledge.

Fredrickson, J. W. (1983). Strategic process research: Questions and recommendations. *Academy of management review*, *8*(4), 565-575. https://doi.org/10.5465/amr.1983.4284655

Freedman, L. (2017). The Meaning of Strategy: Part I: The Origin Story (November 2017).

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

Freeman, R. E. (2020). *Strategic management: A stakeholder approach*. Cambridge University Press.

Fu, Q., & Easton, J. M. (2017). Understanding data quality: Ensuring data quality by design in the rail industry. In *2017 IEEE International Conference on big data (big data)* (pp. 3792-3799). IEEE. https://doi.org/10.1109/BigData.2017.8258380

Fumasoli, T., & Hladchenko, M. (2023). Strategic management in higher education: Conceptual insights, lessons learned, emerging challenges. *Tertiary Education and Management*, *29*(4), 331-339. https://doi.org/10.1007/s11233-024-09134-5

Gachua, M. W. & Orwa, B. H. (2015). Factors affecting strategy implementation in public universities in Kenya: Case of Jomo Kenyatta University of Agriculture and Technology. *International journal of education and research*, *3*(12),313-326. http://www.ijern.com/

Gairola, V. K., Seetharaman, A., Maddulety, K., & Gururajan, R. (2023). Critical success factors (CSF) of Indian Small and Medium manufacturing enterprises:: Received: 27th July 2023; 2023; Accepted: 16th August 2023. *Social is Series in Social Science*, *5*, 63-79.

George, B. (2016). Unraveling the determinants of SP effectiveness in public organizations: a strategic decision-making perspective at the individual and organizational level. Vol.2

Getachew, S. (2020). Assessment on the effect of employee's motivation on the organizational performance, case study on school of Nation primary & secondary school(Doctoral dissertation, St. Mary University. http://hdl.handle.net/123456789/5563

Gioia, D. A., Thomas, J. B., Clark, S. M., & Chittipeddi, K. (1994). Symbolism and strategic change in academia: The dynamics of sense making and influence. *Organization science*, *5*(3), 363-383. https://doi.org/10.1287/orsc.5.3.363

Giroux, H. A. (2023). *Critical theory and educational practice*. In *The critical pedagogy reader* (pp. 50-74). Routledge.

Goldman, E. F. (2012). Leadership practices that encourage strategic thinking. *Journal of Strategy and Management*, *5*(1), 25-40. https://doi.org/10.1108/17554251211200437

Grant, G. (2024). *Purpose-driven Innovation Leadership for Sustainable Development: A Qualitative Case Study Approach*. Taylor & Francis.

Grant, R. M. (2024). *Contemporary strategy analysis*. John Wiley & Sons.

Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, *50*(2), 327-347. https://doi.org/10.5465/amj.2007.24634438

Grigoruta, M. V., & Mironescu, R. (2023). Resource allocation and institutional performance in higher education. *Sustainability*, 15(4), 3125.

Grigoruta. M.V.B., &Mironescu, C(2023). Attracting high-potential human capital in public institutions by implementing talent management. *Elevating Europe*, (pp23-32)

Guba, E. G. and Y. S. Lincoln (1994). 'Competing Paradigms in Qualitative Research', in N. K. Denzin and Y. S. Lincoln (eds.), Sage: Thousand Oaks, CA. miguelangelmartinez.net

Gullmark, P., Salvato, C., & Clausen, T. H. (2025). Middle managers matter! Unpacking the deployment and adaptation of organization-level dynamic capabilities. *Public Management Review*, 1-28. https://doi.org/10.1080/14719037.2025.2469826

Hamel, G., & Prahalad, C. K. (1999). *Competing for the future*. Harvard Business School Press.

Hart, P. F., & Rodgers, W. (2024). Competition, competitiveness, and competitive advantage in higher education institutions: a systematic literature review. *Studies in Higher Education*, *49*(11), 2153-2177. https://doi.org/10.1080/03075079.2023.2293926

Harvey, L., & Green, D. (1993). Defining quality. *Assessment & Evaluation in Higher Education*, *18*(1), 9–34.

Hasan, N., Rana, R. U., Chowdhury, S., Dola, A. J., & Rony, M. K. K. (2021). Ethical considerations in research. *Journal of Nursing Research, Patient Safety and Practise (JNRPSP) 2799-1210*, *1*(01), 1-4. http://journal.hmjournals.com/index.php/JNRPSP

Hashim, M. A. M., Tlemsani, I., Mason-Jones, R., Matthews, R., & Ndrecaj, V. (2024). Higher education via the lens of industry 5.0: Strategy and perspective. *Social Sciences & Humanities Open*, *9*, 100828. https://doi.org/10.1016/j.ssaho.2024.100828

Hashim, M. A. M., Tlemsani, I., Matthews, R., Mason-Jones, R., & Ndrecaj, V. (2022). Emergent strategy in higher education: postmodern digital and the future?. *Administrative Sciences*, *12*(4), 196. https://doi.org/10.3390/admsci12040196

Hatry, H. P. (2010). *Performance measurement: Getting results*. Urban Institute Press.

Hellström, T., & Husted, K. (2004). Mapping knowledge and intellectual capital in academic environments: A focus group study. *Journal of Intellectual capital*, *5*(1), 165-180.

Henkel, J. (2009). The risk-return paradox for strategic management: disentangling true and spurious effects. *Strategic management journal*, *30*(3), 287-303.

Henry, A. (2021). *Understanding strategic management*. Oxford University Press.

Hiatt, J. M. (2006). *ADKAR: A model for change in business, government and our community*. Prosci Learning Center Publications.

Hill, C. W., Jones, G. R., & Schilling, M. A. (2023). *Strategic management: theory & cases*. Cengage Learning. http://thuvienso.thanglong.edu.vn//handle/TLU/8890

Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2020). Competitiveness and Globalization.

Hofer.C.W.,& Schendel.D.(1978). strategy formulation: Analytical Concepts, New york, west Publishing. https://lccn.loc.gov/78001846

Höglund, L., Mårtensson, M., & Thomson, K. (2021). Strategic management, management control practices and public value creation: the strategic triangle in the Swedish public sector. *Accounting, Auditing & Accountability Journal*, *34*(7), 1608-1634.Balwant, P. T.

Holdaway, E.A., & Meekison, J.p.(1999). Strategic planning at a Canadian university. Long range planning, 23(4),104-113). https://doi.org/10.1016/0024-6301(90)90158-Z

Hood, C. (1991). A public management for all seasons? *Public Administration, 69*(1), 3–19. https://doi.org/10.1111/j.1467-9299.1991.tb00779.x

Hox, J. J. (2021). Confirmatory factor analysis. *The encyclopedia of research methods in criminology and criminal justice*, *2*, 830-832. http://hdl.handle.net/123456789/7190

Hung-Baesecke, C. F. J., Chen, Y. R., & Lan, N. (2021). The Excellence theory – Origins, contribution and critique. In C. Valentini (Ed.), Public relations (pp. 313-334). Berlin: De Gruyter Mouton

Hunt, C. Stevens, R. E., Loudon, D. L.Oosting, K. W. & Migliore, R. H., (1996). *Strategic planning for private higher education*. Routledge. https://lccn.loc.gov/96040976

Hurtado, S., Alvarez, C. L., Guillermo-Wann, C., Cuellar, M., & Arellano, L. (2012). A model for diverse learning environments. *Journal of Higher Education, 83*(1), 1–26.

Inga, E., Inga, J., Cárdenas, J., & Cárdenas, J. (2021). Planning and strategic management of higher education considering the vision of Latin America. *Education Sciences*, *11*(4).

Jain, P. (2025). *Strategic environmental scanning in higher education: Digital transformation and institutional resilience*. *International Journal of Educational Management*.

James, Glenn. (2017). Framework for strategic analysis in higher education; Tennessee Tech University. https://doi.org/10.1109/TE.2016.2636038

James, M., & Derrick, G. (2020). When culture trumps strategy: Higher education institutional strategic plans and their influence on international student recruitment practice. Higher Education, 79, 569–588. https://doi.org/10.1007/s10734-019-00424-1

Jaser, Z. (2021). The real value of middle managers. *Harvard business review, 7,* 6-21.

Jensen, I. B., & Dikilitas, K. (2025). A scoping review of action research in higher education: implications for research-based teaching. *Teaching in Higher Education*, *30*(1), 84-101.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm. *Journal of Financial Economics, 3*(4), 305–360.

Jiang, H., & Men, R. L. (2017). Creating an engaged workforce: The impact of authentic leadership: Transparent organizational communication, and work-life enrichment. *Communication research*, 44(2), 225-243.

Jiang, K., Hu, J., Liu, S., & Lepak, D. P. (2021). Understanding employee performance through strategic human resource management practices. *Human Resource Management Review, 31*(2), 100748.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: Educational Researcher, 33(7), 239. http://dx.doi.org/10.3102/0013189X033007014

Joyce, M., & Kirakowski, J. (2015). Measuring attitudes towards the Internet: The general Internet attitude scale. *International Journal of Human Computer Interaction*, *31*(8), 506-517. https://doi.org/10.1080/10447318.2015.1064657

Kalimullina, O., Tarman, B., & Step nova, I. (2021). Education in the context of digitalization and culture. *Journal of Ethnic and Cultural Studies*, *8*(1), 226-238.

Kamara, Y., Rahida, F. G., Kargbo, W., & Koroma, C. (2024). Application of Strategic Management in Educational Organizations. *Global Scientific and Academic Research Journal of Education and literature*, *2*(7), 01-11.

Kang, S. P., Chen, Y., Svihla, V., Gallup, A., Ferris, K., & Datye, A. K. (2022). Guiding change in higher education: An emergent, iterative application of Kotter's change model. *Studies in Higher Education, 47*(2), 270-289. https://doi.org/10.1080/03075079.2020.1741540

Kaplan, R. S. (1992). Conceptual foundations of the balanced scorecard. *Handbooks of management accounting research, 3*, 1253-1269.

Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. http://www.hbr.org/

Kaplan, R. S., & Norton, D. P. (2001). *Strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Harvard Business School Press.

Kaplan, R. S., & Norton, D. P. (2004). *Strategy maps: Converting intangible assets into tangible outcomes*. Harvard Business School Press.

Karagoz, Y., Korthaus, A., & Augar, N. (2008). How do project managers manage project knowledge in the public sector? An empirical enquiry from the Victorian Public Sector in Australia. *Australasian Journal of Information Systems, 20*, 1-20.

Kayyali, M. (2025). *Fundamentals of Strategic Management in Higher Education*: Challenges, Opportunities, and Future Trends. *Building Organizational Capacity and Strategic Management in Academia*, 237-268. DOI: 10.4018/979-8-3693-6967-8.ch009

Kenny, J. (2016). Excellence Theory and its Critics: A literature review critiquing Grunig's strategic management of public relations paradigm. *Asia Pacific Public Relations Journal*, *17*(2). search.ebscohost.com

Kettunen, J. (2015). Stakeholder relationships in higher education. *Tertiary Education and Management, 21*, 56-65. http://dx.doi.org/10.1080/13583883.2014.997277

Kettunen, J. (2015). Strategic management in higher education: Enhancing institutional effectiveness. *International Journal of Educational Management*, 29(5), 582–598.

Kezar, A. J. (2001). *Understanding and Facilitating Organizational Change in the 21st Century*: Recent Research and Conceptualizations. ASHE-ERIC Higher Education Report.

Khadija, H. (2022). STAKEHOLDERS IN EDUCATION. *Annals of the University of Oradea, Economic Science Series, 31*(1), 424-501

Khadka, S. (2024). *Effect of job stress on employee Turnover intention in Nepalese Development banks* (Doctoral dissertation, Shanker Dev. Campus).

Khan, K. Y. Farooq, S. U. and Ullah, M. I. (2010). The relationship between rewards and Employee motivation in commercial banks in Pakistan, Research Journal of International Studies, (14)37 – 52

Khan, T., Komm, A., Maor, D., & Pollner, F. (2021). Back to human': Why HR leaders want to focus on people again. *McKinsey and Company:* Vol.4

Khuzwayo, S., & Mashau, P. (2025). The Effectiveness of Strategic Management Practices at a Public University in South Africa. *Journal of Sustainable Development Law and Policy 16*(1), 162-186. https://www.ajol.info/index.php/jsdlp

Kifle, (2019). Development and Implementation of Strategic Plans in Ethiopian First Generation Public Universities: Its Status and Contributing Factors, AAU. Ethiopia.

Kim, Y., & Ployhart, R. E. (2022). The effects of employee involvement and participation on organizational outcomes. *Human Resource Management Review, 32*(1), 100857.

Kinyanjui, N. J., & Juma, D. (2014). Investigate the effect of strategic plans implementation on performance in Kenya's public universities. A case study of the University of Nairobi. *European Journal of Business Management*, *2*(1), 161-173.

Kivits, R., & Sawang, S. (2021). Stakeholder theory. *The dynamism of stakeholder engagement: A case study of the aviation industry*, 1-8.

Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, *6*(5), 26-41.

Kleeman, G. L., & Richardson Jr, R. C. (1985). Student characteristics and perceptions of university effectiveness. *The Review of Higher Education*, *9*(1), 5-20.

Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, *2*(1), 73. https://doi.org/10.1038/s43586-022-00150-6

Kogut, B. (2023). *A note on global strategies*. In *International Strategic Management* (pp. 21-28). Routledge. https://doi.org/10.4324/9781315058993-3

Kose, E. K., & Kose, M. F. (2019). Strategic management and leadership of education: Central and local perspectives in Turkey. Educational Policy Analysis and Strategic Research, 348. Lancaster, PA: Technomic. https://doi.org/10.29329/epasr.2019.208.16

Kothari, C. R. (2004). *Research methodology, methods and techniques*. New Delhi, new age international publisher. elib.vku.udn.vn

Kotter, J. P. (1996). *Leading change*. Harvard Business School Press.

Kotter, J. P. (2017). What leaders really do. In *Leadership perspectives* (pp. 7-15). Routledge.

Kotter, J. P. (2019). *Accelerate: Building strategic agility for a faster-moving world*. Harvard Business Review Press.

Kraut, A. I. (2009). An overview of organizational surveys. *Organization change: A comprehensive reader*, 300-311. books.google.com

Kruger, D. (1988). In search of human science psychology. *South African Journal of Psychology*, *18*(1), 1-9. https://doi.org/10.1177/008124638801800101

Kulenovic, M., Folta, M., & Veselinović, L. (2021). The analysis of total quality management critical success factors. *Quality Innovation Prosperity*, *25*(1), 88-102.

Kurt, S. (2014). Creating technology-enriched classrooms: Implementation challenges in Turkish education. *Learning, Media and Technology*, *39*(1), 90-106.

Laderman, S., Cummings, K., Lee, J. C., Tandberg, D., & Weeden, D. (2023). Higher education finance in the United States: Sources of funding and impacts of state investments. In *Comparative Higher Education Politics: Policymaking in North America and Western Europe* (pp. 157-187). Cham: Springer International Publishing. https://10.1007/978-3-031-25867-1_7

Lang, J. R & Chowdhury, S. D., (1988). Turnaround in small firms: An assessment of efficiency strategies. *Journal of Business Research, 36*(2), 169-178.

Laszlo, A., & Krippner, S. (1998). Systems theories: Their origins, foundations, and development. *Advances in Psychology-Amsterdam-*, *126*, 47-76.

Latorre-Medina, M. J ; Sastre-Morcillo, P.& Blanco-Encomienda, F. J., (2018). Analysis of the factors influencing job burnout: Empirical evidence from Spain. *Pertanika Journal of Social Sciences & Humanities*, *26*(4), 2211-2227.

Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment: Managing differentiation and integration*. Boston: Harvard Business School Press

Lee, Y. (2022). Dynamics of symmetrical communication within organizations: The impacts of channel usage of CEO, managers, and peers. *International Journal of Business Communication*, *59*(1), 3-21. https://doi.org/10.1177/2329488418803661

Lee, Y., & Li, J. Y. Q. (2020). The value of internal communication in enhancing employees' health information disclosure intentions in the workplace. *Public relations review*, *46*(1), 101872. https://doi.org/10.1016/j.pubrev.2019.101872

Leeming, D. (2018). The use of theory in qualitative research. *Journal of Human Lactation*, *34*(4), 668-673. https://doi.org/10.1177/0890334418794666

Leeming, P., & Harris, J. (2022). Self-Determination theory and tasks: A motivational framework for TBLT research. *TASK*, *2*(2), 164-183.

Lemmink, K. A., Kemper, H. C., Greef, M. H., Rispens, P., & Stevens, M. (2003). The validity of the sit-and-reach test and the modified sit-and-reach test in middle-aged to older men and women. *Research quarterly for exercise and sport*, *74*(3), 331-336.

Leoni, S. (2022). An agent-based model for tertiary educational choices in italy. *Research in Higher Education*, *63*(5), 797-824. https://doi.org/10.1007/s11162-021-09666-4

Leskaj, E. (2017). The challenges faced by the strategic management of public organizations. *Revista» Administratie si Management Public « (RAMP)*, (29), 151-161.

Leslie, D. W., & Fretwell Jr, E. K. (1996). *Wise Moves in Hard Times: Creating & Managing Resilient Colleges & Universities*. St.San Francisco, CA 94104. ERIC

Li, S., Davies, B., Edwards, J., Kinman, R., & Duan, Y. (2002). Integrating group Delphi, fuzzy logic and expert systems for marketing strategy development: the hybridization and its effectiveness. *Marketing Intelligence & Planning*, *20*(5), 273-284.

Li, Z., & Liu, H. (2021). Mixed methods: Interviews, surveys, and cross-cultural comparison.

Lincoln, Y. & Guba, E. (1985). "Naturalistic Inquiry", SAGE, Beverly Hills, 1985. ERIC

Locke, E. A., & Latham, G. P. (2019). The development of goal setting theory: A half century retrospective. *Motivation Science*, *5*(2), 93. psycnet.apa.org

Lu, C. (2023). Two essays on using data manipulation to justify biased reports.

Lubienski, C., Perry, L. B., Kim, J., & Canbolat, Y. (2023). Market models and segregation: Examining mechanisms of student sorting. In *Comparative Perspectives on School Segregation* (pp. 16-36). Routledge. https://doi.org/10.1080/03050068.2021.2013043

Luhanga, M. (2010). Strategic Planning of Higher Education Institutions in Africa: A Case Study of the University of Daressalaam.Procedia Social and Behavioral Sciences.,2(1), 7071– 7085, Retrieved from www.sciencedirect.com on August 21. 2015.

Lutfiani, N., & Meria, L. (2022). Utilization of big data in educational technology research. *International Transactions on Education Technology*, *1*(1), 73-83.

Mac Nally, R. (2002). Multiple regression and inference in ecology and conservation biology: further comments on identifying important predictor variables. *Biodiversity & Conservation*, *11*, 1397-1401. https://doi.org /10.1023/A:1016250716679

Macheridis, N., & Paulsson, A. (2021). Tracing accountability in higher education. *Research in education*, *110*(1), 78-97. https://doi.org/10.1177/0034523721993143

Madhani, P. M. (2020). Performance optimisation of retail industry: Lean Six Sigma approach. *ASBM Journal of Management*, *13*(1), 74-91.

Maditinos, D. I., Papadopoulos, D., & Prats, L. (2014). The free time allocation and its relationship with the perceived quality of life (QoL) and satisfaction with life (SwL). *Procedia Economics and Finance*, *9*, 519-532.

Mailu, R. N., Ntale, J. F., & Ngui, T. K. (2018). Strategy implementation and organizational performance in the pharmaceutical industry in Kenya. *International Academic Journal of Human Resource and Business Administration*, *3*(2), 33-47.

Malhotra, G., Dandotiya, G., Shaiwalini, S., Khan, A., & Homechaudhuri, S. (2025). Benchmarking for organisational competitiveness: a resource-based view perspective. *Benchmarking: An International Journal*, *32*(3), 943-964.

Mangruwa, R., & Syahputra, S. (2023). *Pest Analysis: Improvement Strategies for "Kampus Merdeka"* Quality at Indonesian Higher Education. In *1ST Bengkulu International Conference on Economics, Management, Business and Accounting (MBA 2023)* (pp. 164-170). Atlantis Press.

Mannan, Z. (2025). Leadership Approaches in Public Owned Industrial Organisations: Evidence from a Developing Country. *Управленческие науки*, *15*(1), 78-87. cyberleninka.ru

Manuel, Ibarra-Cisneros, M. A., Hernández-Perlines, F., & Rodríguez-Garcia, M. (2020). Intellectual capital, organisational performance and competitive advantage. *14*(6), 976.

Marginson, S. (2011). Higher education and public good. *Higher Education Quarterly*, 65(4), 411–433.

Marginson, S. (2018). Higher education and the common good. *Melbourne University Press*

Maria, E. D., Marchi, V. D., & Micelli, S. (2013). Environmental strategies, upgrading and competitive advantage in global value chains. *22*(1), 62-72.

Martinr, S., & Uribe, M. (2021). The influence of reward system on employee job satisfaction with work motivation as intervening variables (case study on employees of medical department United States). *Medal Journal: Nursing, Health and Midwife Participation*, *2*(2), 53-71. https://doi.org/10.59733/medalion.v2i2.25

Meek, V. L., Goedegebuure, L., Santiago, R., & Carvalho, T. (Eds.). (2010). *The changing dynamics of higher education middle management* (Vol. 33). Springer Science & Business Media.

Mekedas, (2019). The challenges of implementing Strategic Management in Commercial Bank of Ethiopia, Adds Ababa. academia.edu

Mekonnen, A. (2015). Assessment of strategic management practices: the case of Ethiopia insurance company. (Dissertation St. Mary's University). repository.smuc.edu.et

Men, L. R., & Stacks, D. (2014). The effects of authentic leadership on strategic internal communication and employee-organization relationships. *Journal of public relations research*, *26*(4), 301-324. https://doi.org/10.1080/1062726X.2014.908720

Mesfin, (2022). Practices and challenges of Strategy implementation in the case of Dejene G/Meskel import and Export, Addis Ababa, Ethiopia.

Metasebia, (2022). Role of Strategic Change Management in the Development of Educational Leadership in the Education Sector of Ethiopia

Miles, M. & Huberman, A. (1994). "Qualitative data analysis", SAGE Publications, 1994.

Miles, R. E., & Snow, C. C. (1978). *Organizational strategy, structure, and process*. McGraw-Hill.

Ministry of Education (2018). Education development Roadmap. Addis Ababa, Ethiopia: Unpublished

Ministry of Education (2025).Annual Education Abstract .Addis Ababa: Ethiopia; Unpublished

Ministry of Education (MoE) (2019). Education Development Road Map; Ethiopia. Unpublished

Ministry of Education (MoE) (2019). *Education Sector Development Program VI* (2014/15-2019/20). Unpublished

Ministry of Education (MOE). (1994a). Education and Training Policy, Ethiopia. Unpublished

Ministry of Education (MOE). (2023).The New Education and Training Policy, Ethiopia. Unpublished

Ministry of Education,(2019). Proclamation No.1152/2019. Proclamation of higher education, Ethiopia, Addis Ababa. Unpublished

Ministry of science and higher Education (2021).Annual education abstract .Addis Ababa, Ethiopia: Unpublished

Ministry of Science and Higher Education (MOSHE) (2019). Differentiating the Higher Education System of Ethiopia: A Desk Review: Ethiopia. Unpublished

Mintzberg, H. (1987). The strategy concept I: Five Ps for strategy. *California Management Review, 30*(1), 11–24.

Mintzberg, H. (1994). *The rise and fall of strategic planning*. Free Press.

Mintzberg, H. (2009). *Managing*. Berrett-Koehler Publishers.

Mintzberg, H. (2019). *Strategy safari: A guided tour through the wilds of strategic management*. Pearson.

Mintzberg, H. (2020). *Understanding organizations...finally! Structuring in sevens*. Berrett-Koehler Publishers.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (2020). *Strategy safari: A guided tour through the wilds of strategic management* (2nd ed.). Free Press

Mitchell, A. (2025). *Aligning vision and results: Enhancing strategic implementation. Academy of Strategic Management Journal, 24*(2), 1–2.

Mitchell, R. C. (2009). Strategy formulation. *Noudettu, 30,* 2024.

Mittal, A., Jones, T., Karkar, R., Suh, J., Williams, S., Zheng, Y., & Hsieh, G. (2025). SCOPE: Examining Technology-Enhanced Collaborative Care Management of Depression in the Cancer Setting. *Proceedings of the ACM on Human-Computer Interaction*, *9*(2), 1-33.

Moges Yigezu,(2021).Digitalization in teaching and education: digitalization, the future of work and the teaching professional project: International labour project. Geneva.

Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). Higher education strategy in digital transformation. *Education and Information Technologies*, *27*(3), 3171-3195.

Mohammed, R., & Singh, R. (2022). Training and development climate and administrative employees' productivity in higher education. *Journal of Applied Research in Higher Education*, *14*(1), 77-91. https://doi.org/10.1108/JARHE-08-2020-0268

Mohamud, G. Y., Mohamud, A. S., & Mohamed, B. H. (2015). The relationship between strategic management and organizational performance in Mogadishu-Somalia. *European Journal of Research and Reflection in Management Sciences Vol*, *3*(2).

Mohd Nor, N. F., Hua, T. K., & Jaradat, M. N. (2005). Communication Strategies Among EFL Students-An Examination Of Frequency Of Use And Types Of Strategies Used. *GEMA online journal of language studies*, *12*(3). https://doi.org/107283602/11494415

Mokake, S. N. (2005). Research ethics: there is more to learn behind the scene. *Cross Cultural Perspectives in Educational Research*, 93-123.

Momoh, J. I., & Itohan, I. (2023). The effect of strategic management practices on organizational competitiveness. *International Journal of Research and Development*, *8*(5), 12-15.

Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). *SPSS for introductory statistics: Use and interpretation*. Psychology Press.

Mosiah, L. (2008). *The strategic management of small firms in emerging economies; a study of health biochemistry* (Doctoral dissertation, University of Pretoria).

Mulisa, F. (2022). When does a researcher choose a quantitative, qualitative, or mixed research approach?. *Interchange*, *53*(1), 113-131. https://doi.org/10.1007/s10780-021-09447-z

Mwangi, L. W. (2014). *Factors affecting strategy implementation in public universities in Kenya* (Doctoral dissertation, University of Nairobi). http://hdl.handle.net/11295/76669

Narne, S., Adedoja, T., Mohan, M., & Ayyalasomayajula, T. (2024). AI-Driven Decision Support Systems in Management: Enhancing Strategic Planning and Execution. *International Journal on Recent and Innovation Trends in Computing and Communication*, *12*(1), 268-276. http://www.ijritcc.org/

Newton, J. (2010). Implementing an institution-wide learning and teaching strategy: Lessons in managing change. Studies in Higher Education, 28(4), 427–441. https://doi.org/10.1080/0307507032000122279

Nguyen, T. T., Pham, H. T., & Tran, Q. H. (2023). Strategic planning practices and organizational performance in higher education institutions. *International Journal of Educational Management, 37*(5), 1038–1055.

Nicolas & Walliman, N. (2021). *Research methods: The basics*. Routledge.

Nienaber, H. (2022). Employee engagement: Driving strategy implementation through dimensions of organisation. *Journal of Management & Organization*, *28*(5), 1036-1056.

Noble, C. H. (1999). The eclectic roots of strategy implementation research. *Journal of Business Research, 45*(2), 119–134. https://doi.org/10.1016/S0148-2963(97)00156-3

Nongna, C., Junpeng, P., Hongngam, J., Podjana, C., & Tang, K. N. (2023). Research Analysis for Standards-Setting Appraisal of Competency Level-Based Performance on the Part of Instructors in Higher Education. *Journal of Social Sciences & Humanities*, *31*(1). (pp319-338). http://www.pertanika.upm.edu.my/

Northouse, P. G. (2022). *Leadership: Theory and practice* (9th ed.). Sage Publications

Nyagah, A. S. (2015). Challenges of formulation of strategic plans in secondary schools in Kenya: A case of Mombasa country and its environs. Journal of Education and Practice, 182-183. http://www.iiste.org/

Nyariki, D. M. & Mogotsi, K., Nyangito, M. M., (2011). Drought management strategies among agro-pastoral communities in non-equilibrium Kalahari ecosystems. *Environmental Research Journal*, *5*(4), 156-162. http://hdl.handle.net/123456789/343

O'Regan, N., & Ghobadian, A. (2020). Effective strategic planning and implementation in organizations. *Management Decision, 58*(5), 1013–1030.

Obeidat, B. Y., Al-Hadidi, A., Tarhini, A., & Masa'deh, R. E. (2017). Factors affecting strategy implementation: a case study of pharmaceutical companies in the Middle East. *Review of International Business and Strategy*, *27*(3), 386-408.

OECD. (2021). *OECD principles of corporate governance*. OECD Publishing.

Ogbeiwi, O. (2017). Why written objectives need to be really SMART. *British Journal of Healthcare Management*, *23*(7), 324-336. https://doi.org/10.12968/bjhc.2017.23.7.324

Okamuro, H., & Nishimura, J. (2021). Effects of multilevel policy mix of public R&D subsidies: Empirical evidence from Japanese local SMEs. *Science and Public Policy*, *48*(6), 829-840.

Ongoto, H. K., & Murugi, C. N. (2018). Strategic management practices and change implementation in selected public universities in Kenya.

Oreg, S., & Berson, Y. (2019). Leaders' impact on organizational change: Bridging theoretical and methodological chasms. *Academy of Management Annals*, *13*(1), 272–307. https://doi.org/10.5465/annals.2016.0138

Outram, J. G., Couperthwaite, S. J., & Millar, G. J. (2016). Comparitve analysis of the physical, chemical and structural characteristics and performance of manganese greensands. *Journal of Water Process Engineering*, *13*, 16-26. https://doi.org/10.1016/j.jwpe.2016.07.006

Paauwe, J. (2024). Resource based theory. In *A Guide to Key Theories for Human Resource Management Research* (pp. 231-237). Edward Elgar Publishing.

Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business ethics*, *121*, 451-466. DOI 10.1007/s10551-013-1732-0

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge. https://doi.org/10.4324/9781003117452

Pang, A. & Jin, Y. (2024). Theory advancing practice: The Contingency Theory in the strategic management of crises, conflicts, and complex public relations issues.

Patton, M. Q., & Cochran, M. (2002). A guide to using qualitative research methodology.

Perot, E. (2024). The European Union's nascent role in the field of collective defense: between deliberate and emergent strategy. *Journal of European integration*, *46*(1), 1-23.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179–191.

Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press. taylorfrancis.com

Pham, D. H. (2021). The professional development of academic staff in higher education institution. *Journal of Teacher Education for Sustainability*, *23*(1), 115-131.

Phiri, J., et al. (2024). *Environmental scanning and strategic responsiveness in higher education institutions*. *Journal of Strategy and Management*.

Piórkowska, N., & Ryńca, R. (2020). Factors affecting the process of strategy implementation in a higher education institution. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*, (144), 383-395. http://dx.doi.org/10.29119/1641-3466.2020.144.31

Pitts, R. A. and Lei, D. (2008): Strategic Management: Building and sustaining Competitive Advantage, 4th Ed. New Delhi: Cengage Learning. Research (IJSR), 5(1), 681-689.

Poister, T. H. and G. D. Streib (2010). 'Strategic Management In The Public Sector: Concepts, Models, and Processes', Public Productivity & Management Review, 22, pp. 308-325.

Poister, T. H., Aristigueta, M. P., & Hall, J. L. (2010). *Managing and measuring performance in public and non-profit organizations: An integrated approach*. Jossey-Bass.

Polit, D.F., & Beck, C.T. (2012). Nursing research: Generating and assessing evidence for nursing practice (9th ed.). Philadelphia, PA: Lippincott Williams and Wilkins.

Porter, M. E. (1996). What is strategy? *Harvard Business Review, 74*(6), 61–78.

Pounder, J. (1999). Institutional performance in higher education: is quality a relevant concept?. *Quality assurance in Education*, *7*(3), 156-165.

Power, Aguinis, H., Edwards, J. R., & Bradley, K. J. (2005). Improving understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, *20*(4), 665-685. https://doi.org/10.1177/1094428115627498

Prada, E. D., Mareque, M., & Pino-Juste, M. (2022). Teamwork skills in higher education: is university training contributing to their mastery? *Psicologia: Reflexao e critica*, *35*, 5.

Pramana, C., Chamidah, D., Suyatno, S., & Renadi, F. (2021). Strategies to Improved Education Quality in Indonesia: A Review. *Turkish Online Journal of Qualitative Inquiry*, *12*(3).

Pregoner, J. D. (2024). Research approaches in education: A comparison of quantitative, qualitative and mixed methods. *IMCC Journal of Science*, *4*(2), 31-36.

Proudfoot, K. (2023). Inductive/deductive hybrid thematic analysis in mixed methods research. *Journal of mixed methods research*, *17*(3), 308-326.

Punch, J. M, Heaslip, G. M., Rodgers, B. A., Ryan, C., & Reid, M. (2005). A stress-life methodology for ball grid array lead-free and tin-lead solder interconnects under impact conditions. (pp. 277-284). IEEE. https://doi.org/10.1109/ESIME.2005.1502814

Rachmad, Y. E. (2022). Optimization in Health Theory. academia.edu

Radzilani, T. T., & Ayandibu, A. O. (2021). Investigating the Congruency of Vision, Mission and Motto Statements on Strategic Intent and Allegiance of National Departments in South Africa. *Journal of Public Administration*, *56*(4), 898-914.

Read, Elmuti, D., Jia, H., & Gray, D. (2009). Customer relationship management strategic application and organizational effectiveness: an empirical investigation. *Journal of Strategic Marketing*, *17*(1), 75-96. https://doi.org/10.1080/09652540802619301

Regan, T. H., & Brown, M. T. (2021). Budgeting. In *Financial Management in the Sport Industry* (pp. 186-219). Routledge. https://doi.org/10.4324/9780429316746-8/

Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. *International journal of educational investigations*, *3*(8), 51-59. www.ijeionline.com researchrepository.ilo.org

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance. *Journal of Management, 35*(3), 718–804.

Richards, J. C., & Towne, W. A. (Eds.). (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge university press.

Risi, D., Vigneau, L., Bohn, S., & Wickert, C. (2023). Institutional theory-based research on corporate social responsibility: Bringing values back in. *International Journal of Management Reviews*, *25*(1), 3-23. https://doi.org/10.1111/ijmr.12299

Rodrigues, M., Franco, M., Silva, R., & Oliveira, C. (2021). Success factors of SMEs: Empirical study guided by dynamic capabilities and resources-based view. Sustainability, 13(21), 12301. https://doi. org/10.3390/su132112301.

Rolfe, H. (2003). University strategy in an age of uncertainty: The effect on higher education funding on old and new universities. Higher Education Quarterly, 57(1), 24–47. https://doi.org/10.1111/1468-2273.00233

Rosenthal, J. A. (2011). *Statistics and data interpretation for social work*. Springer publishing

Sabattin, J., Fuertes, G., Alfaro, M., Vargas, M., Gutierrez, S., & Ternero, R. (2020). Conceptual framework for the strategic management: A literature review Descriptive. Hindawi Journal. https://doi.org/10.1155/2020/6253013

Saheer, A & Dachyar, A. Z. N. S. M. (2021). Hotel revival strategy planning with SWOT-Fuzzy AHP-TOPSIS: A case study of a 4-star hotel. (7-11).

Saifani, A. S. I., Andriyani, A., & Lusida, N. (2024). Strategic Management in improving Education Quality. *Jurnal Ilmiah Edukatif*, *10*(1), 122-135.

Saint, W. (2004). Higher education in Ethiopia: The vision and its challenges. *Journal of Higher Education in Africa/Revue de l'enseignement supérieur en Afrique*, (83-113).

Saldana.J. (2009). The Coding Manual for qualitative researchers, 2nd, Sage Publications.

Sale, J. E., & Carlin, L. (2025). The reliance on conceptual frameworks in qualitative research–a way forward. *BMC Medical Research Methodology*, *25*(1), 1-5.

Salinas, C., & Lozano, A. (2019). Mapping and recontextualizing the evolution of the term Latinx: An environmental scanning in higher education. In *Critical readings on Latinos and education* (pp. 216-235). Routledge. https://www/10.4324/9780429021206-14

Saragih, J. R., Purwoko, A., & Purba, T. (2024). Developing Participatory Planning Model to Improve Regional Development Planning. *International Review for Spatial Planning and Sustainable Development*, *12*(4), 279-302. https://doi.org/10.14246/irspsd.12.4_279

Sauser, B. J., Ramirez-Marquez, J. E., Henry, D., & DiMarzio, D. (2008). A system maturity index for the systems engineering life cycle. *International Journal of Industrial and Systems Engineering*, *3*(6), 673-691. https://doi.org/10.1504/IJISE.2008.02068

Schlenger, P., MacLennan, A., Iverson, E., Fresh, K., Tanner, C., Lyons, B., & Wick, A. (2011). Strategic needs assessment: analysis of near shore ecosystem process degradation in Puget Sound. *Technical Report*, *2*, 30-1.

Scott, W. R. (2014). *Institutions and organizations* (4th ed.). Sage Publications.

Selwyn, N. (2016). *Education and technology: Key issues and debates*. Bloomsbury

Selwyn, N. (2020). *Education and technology: Key issues and debates* (3rd ed.). Bloomsbury Academic.

Selwyn, N. (2024). Digital de-growth: Toward radically sustainable education technology. *Learning, Media and Technology*, *49*(2), 186-199.

Shamelo, M. A., et al. (2025). Sense-making and managers: Analyzing perceptions of critical success factors influencing strategy implementation in comprehensive universities in Ethiopia. *Discover Education*, *4*(1), 1–18. https://doi.org/10.1007/s44217-025-01012-5

Shanko, A., et al. (2024). Contribution of strategic management paths and practices to public research university performance in Ethiopia: Bridging policy-practice gaps. *Studies in Science of Science, 3*(2), 55–74.

Shattock, M. (2014). *International trends in university governance*. Routledge.

Sheldon,A.(1980). Organizational paradigms: A theory of organizational change. *Organizational dynamics*, *8*(3), 61-80. https://doi.org/10.1016/0090-2616(80)90045-5

Shiri, R., & Bergbom, I. (2023). Professional development & employee capability building in higher education institutions. *HE Research & Development, 42*(4), 891–906.

Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American journal of Applied Mathematics and statistics*, *9*(1), 4-11. DOI:10.12691/ajams-9-1-2

Smart, J. C. (2003). Organizational effectiveness of 2-year colleges: The centrality of cultural and leadership complexity. *Research in Higher Education*, *44*, 673-703.

Soares, P. H., & Del Gáudio, R. (2018). On the Imperative of Planning Employee. *Strategic Employee Communication: Building a Culture of Engagement*, 237.

Soliman, S., Anchor, J., & Taylor, D. (2019). The international strategies of universities: Deliberate or emergent Studies in Higher Education, 44(8), 1413–1424. https://doi.org/10.1080/03075079.2018.1445985

Srinivasan, R. (2025). *Strategic management: the Indian context*. PHI Learning Pvt. Ltd.

Stacey, R. D. (1995). The science of complexity: An alternative perspective for strategic change processes. *Strategic management journal, 16*(6), 477-495.

Stewart, E. A., Greer, S. L., Wilson, I., & Donnelly, P. D. (2016). Power to the people? An international review of the democratizing effects of direct elections to healthcare organizations. *The International journal of health planning and management*, *31*(2).

Stewart, M. (2021). *Understanding learning*: Theories and critique. In *University teaching in focus* (pp. 3-28). Routledge. https://www.10.4324/9781003008330-2

Stoelhorst, J. W. (2023). Value, rent, and profit: A stakeholder resource-based theory. *Strategic Management Journal*, *44*(6), 1488-1513. https://doi.org/10.1002/smj.3280

Strandholm, K., & Kumar, K. (2003). Differences in environmental scanning activities between large and small organizations: the advantage of size. *Journal of American Academy of Business*, *3*(1/2), 416-421.

Strawsman, A. A., Fard, H. D., & Yakhkeshi, H. (1990). The relationship between knowledge management and organizational learning within middle and senior managers of Iranian public organizations. In *Information and knowledge Management* .5, (6), 102-112

Strunk, K. K. (2023). Critical approaches to quantitative research: Review, critique, and applications. *Handbook of critical education research*, 56-74.

Stukalina, Y. (2014). Strategic management of higher education institutions. *Organizacijų vadyba: sisteminiai tyrimai*, (70), 79-90.

Syrett, M. (2007). *Successful strategy execution: How to keep your business goals on target* (Vol. 5). John Wiley & Sons.

Tabatoni, P., & Barblan, A. (2002). Strategic Management, a Tool of Leadership; Concepts and Paradoxes, Strategic Management and Universities' Institutional Development, red. *P. Tabatoni, J. Davies, A. Barblan, European University Association*.

Tadesse, T., Manathunga, C. E., & Gillies, R. M. (2018). Making sense of quality teaching and learning in higher education in Ethiopia: Unfolding existing realities for future promises. *Journal of University Teaching and Learning Practice*, *15*(1), 1-22. https://doi.org/10.53761/1.15.1.4

Taherdoost, H. (2017). Determining sample size; how to calculate survey sample size. *International Journal of Economics and Management Systems*.

Taiwo, A. A., & Lawal, F. A. (2016). Vision and mission in organization: Myth or heuristic device?. *The International Journal of Business & Management*, *4*(3).

Talib, A., & Steele, A. (2000). The research assessment exercise: Strategies and trade-offs. Higher Education Quarterly, 54(1), 68–87. https://doi.org/10.1111/1468-2273.00145

Tamiru. F. & Rani, D. L., & (2016). Adoption of Strategic Management in Medium and Large Manufacturing Companies in Ethiopia. *Journal of African and Asian Studies*, *20*, 57-64.

Tan, J. E. T. (2019). Higher Education in Singapore: The Policy State and Governance. In *Transformations in Higher Education Governance in Asia: Policy, Politics and Progress* (pp. 139-151). Singapore: Springer Singapore.

Tashakkori, A., & Teddlie, C. (2010). Putting the human back in ''human research methodology'': The researcher in mixed methods research. *Journal of mixed methods research*, *4*(4), 271-277. https://doi.org/10.1177/1558689810382532

Tasopoulou, K., & Tsiotras, G. (2017). Benchmarking towards excellence in higher education. *Benchmarking: An International Journal*, *24*(3), 617-634.

Tawse, A., & Tabesh, P. (2021). Strategy implementation: A review and future research agenda. *Long Range Planning*, *54*(5), 102062.

Taylor, J. S., de Lourdes Machado, M., & Peterson, M. W. (2008). Leadership and strategic management: Keys to institutional priorities and planning. *European Journal of Education*, *43*(3), 369-386. https://doi.org/10.1111/j.1465-3435.2008.00363.x.

Taylor, J., & Baines, S. (2012). Strategic management and governance in higher education. *Studies in Higher Education*, 37(8), 983–1000.

Taylor, S. J., & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meanings*. Wiley-Inter-science. https://lccn.loc.gov/84007522

Teddlie, C., & Tashakkori, A. (2008). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and Behavioral sciences*. Sage

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research*, *1*(1), 77-100. https://doi.org/10.1177/1558689806292430

Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies, 45*(1), 8–37.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning, 51*(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007

Teece, D. J., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility. *California Management Review, 58*(4), 13–35.

Teferi, M. T., & Beyene, D. (2023). The strategic leadership practices in public higher education institutions of Ethiopia: Evidences from Jimma University. *Ethiopian Journal of Education Studies, 18*(1), 88–107.

Teferra, D., & Altbach, P. G. (2004). African higher education: Challenges for the 21st century. *Higher Education, 47*(1), 21–50.

Thang, P. D., & Tuyen, T. Q. (2023). Efficient administrative management strategy for activities in international higher education institutions: Lessons for Vietnam. *International research journal of management, IT and social sciences*, *10*(3), 221-232.

Thomas, H. (1984). Mapping strategic management research. *Journal of general management*, *9*(4), 55-72. https://doi.org/10.1177/030630708400900404

Thomas, T. Schermerhorn Jr, J. R., & Dienhart, J. W. (2004). Strategic leadership of ethical behavior in business. *Academy of Management Perspectives, 18*(2), 56-66.

Timotiwos, Y. (2015). Assessment of the Practice of Strategic Management Process: In the Case of Nyala Insurance S.C. http://hdl.handle.net/123456789/1722

Toh, S. Y., Tehseen, S., Mahmoud, A. B., Cheok, J., Grigoriou, N., & Opute, J. (2022). Mission statement effectiveness: investigating managers' sense making role. *Corporate Communications: An International Journal*, *27*(2), 329-345.

Tømte, C. E. (2024). Conceptualisation of professional digital competence for school leaders in schools with 1: 1 coverage of digital devices. *Computers & Education*, *222*, 105151.

Toshov, M. (2024). STRATEGIC MANAGEMENT OF HIGHER EDUCATION. *Modern Science and Research*, *3*(2), 461-468. https://doi.org/10.5281/zenodo.10655524

Toyon, M. A. S. (2021). Explanatory sequential design of mixed methods research: Phases and challenges. *Journal of Research in Business and Social Science*, *10*(5), 253-260.

Trunina, I., Pryakhina, K., & Bilyk, M. (2021). Management of competitive advantages of higher education institutions. In *2021 IEEE International Conference on Modern Electrical and Energy Systems (MEES)* (pp. 1-5). IEEE. Doi.10.1109/MES52427.2021.9598759

Tsehay, (2014). Practices and Challenges of Formulating, Implementing and Controlling Strategic Planning in Selected NGOs (Doctoral dissertation, St. Mary's University).

Tung, R. L., & Aycan, Z. (2008). Key success factors and indigenous management practices in SMEs in emerging economies. *Journal of World Business*.

Ul Hassan, M., Murtaza, A., & Rashid, K. (2025). Redefining higher education institutions (HEIs) in the era of globalization and global crises: A proposal for future sustainability. *European Journal of Education*, *60*(1), e12822.

UNESCO,(2015). Global Convention on the recognition of qualifications concerning higher education; https://www.unesco.org/en/higher-education

US Department of labour (1993) High Performance work practices & firm performance, Washington DC: US department of labour, office of the American Workplace.

Van Karnenbeek, L. J. (2020). *Creating the city step-by-step: When incremental development strategies meet institutions* (Doctoral dissertation, Wageningen University and Research).

Vasudevan, H. (2021). Resource-based view theory application on the educational service quality. *International Journal of Engineering Applied Sciences and Technology,[S. l.]*, *6*(6), 174-186. http://www.ijeast.com/

Venkatraman, N. & Camillus, J. C. (1984). Exploring the concept of "fit" in strategic management. Academy of management Review,9(3),513-525.

Venkatraman, N. (1989). The concept of fit in strategy research. *Academy of Management Review, 14*(3), 423–444.

Venkatraman, N., & Prescott, J. E. (1990). Environment–strategy coalignment. *Academy of Management Journal, 33*(1), 1–33.

Veskaisri, K., Chan, P., & Pollard, D. (2007). Relationship between strategic planning and SME success: empirical evidence from Thailand. *Asia and pacific DSI*, *2007*, 1-13.

Von Bertalanffy, L. (1955). The history and status of general systems theory. *Academy of management journal*, *15*(4), 407-426. https://doi.org/10.5465/255139

Vuoris, J. (2016). Towards strategic actor hood? The execution of institutional positioning strategies at Finnish universities of applied sciences. Higher Education Quarterly, 70(4), 400–418. https://doi.org/10.1111/hequ.12103

Wagaw, T. G. (1990). *The Development of Higher Education and Social Change: An Ethiopian Experience.* African Series 2. Michigan State University Press, 1405 South Harrison Road, Suite 25, Manly Miles Building, East Lansing, MI 48823-5202

Wang, Y., Cao, Y., Xi, N., & Chen, H. (2021). High-performance work system, strategic flexibility, and organizational performance; the moderating role of social networks. *Frontiers in psychology*, *12*, 670132. https://doi.org/10.3389/fpsyg.2021.670132

Ward, K., & Bickford, D. (1996). *Strategic alignment and performance* (original work referenced in alignment literature).

Weber, M. (1978). *Economy and society: An outline of interpretive sociology*. University of California Press.

Wen, W., & Marginson, S. (2023). Governance in Chinese universities. In *University collegiality and the erosion of faculty authority* (pp. 171-197). Emerald Publishing Limited.

Wheelen, T. L., & Hunger, J. D. (2017). *Strategic management and business policy: Towards Globalization, innovation, and sustainability* (15^{ed}.). Pearson Education, Inc. New Jersey

Whitty, G. (2006). Education (al) research and educational policy-making: Is conflict inevitable? British Educational Research Journal, 32(2), 159-176.

Wiersma, W., & Jurs, S. G. (2005). Research methods in education: An introduction (8th ed.). Boston: Pearson Education.

Witesman, E., Agle, B., Ames, J., Christenson, S. Moore, M., & Pankey, R. (2023). From profit maximization to social welfare maximization: Reclaiming the purpose of American business education. *Futures*, *150*, 103152. https://doi.org/10.1016/j.futures.2023.103152

Woelert, P., & Stensaker, B. (2024). *Strategic governance and organizational adaptation in higher education*. *Higher Education Quarterly*.

Woelert, P., & Stensaker, B. (2025). *Strategic bureaucracy: The convergence of bureaucratic and strategic management logics in the organizational restructuring of universities. Minerva, 63*, 1–21. https://doi.org/10.1007/s11024-024-09535-1

World Bank, (2004). Higher education development in Ethiopia pursuing the vision. Washington D.C. World Bank

World Bank. (2008). Higher education: The lessons of experience. Washington, D.C.: Author.

Wubishet (2018). Assessment of strategic management practices: The case of private Banks in Ethiopia: M.A. thesis A.A.U; Addis Ababa; Ethiopia. academia.edu

Yunita, D., Fadiah, B., Lainatusshifa, L., & Maulida, P. (2024). Analysis The Role Of Infrastructure In Effective Learning. *Journal Pendidikan Sastra Inggris*, *4*(1), 132-138.

Zack, M. H. (2009). *Knowledge and strategy*. Routledge. api.taylorfrancis.com

Zambrano-Gutiérrez, J. C., & Puppim de Oliveira, J. A. (2022). The dynamics of sources of knowledge on the nature of innovation in the public sector: Understanding incremental and transformative innovations in local governments. *Journal of Public Administration Research and Theory*, *32*(4), 656-670. https://doi.org/10.1093/jopart/muab053

Zant, M., Schlingmann, A., Reyes-García, V., & García-del-Amo, D. (2023). Incremental and transformational adaptation to climate change among Indigenous Peoples and local communities: a global review. *Mitigation and Adaptation Strategies for Global Change*, *28*(8), 57. https://doi.org/10.1007/s11027-023-10095-0

Zerafati, M. H., & Hosseinpour, R. (2024). Knowledge Management in Higher Education: A Meta-synthesis of Success Factors, Challenges, and Implementation Strategies. *Strategic Management of Organizational Knowledge*, *7*(4).

Zhao, Y., & Frank, K. A. (2003). Factors affecting technology uses in schools. *American Educational Research Journal*, *40*(4), 807–840

Appendixes

Appendix:1



College of Education and Behavioral Studies

Department of Educational Planning and Management

A Questionnaire to be filled by Department heads, line managers, academic & supportive Staff,

Greetings! Dear respondent, I am PhD student in College of Education and Behavioral Studies, Department of Educational Planning and Management(Policy and Strategic Management) at Addis Ababa University. I am engaging on a research project entitled "*Strategic Management Practices in higher education: An Analysis of Efficiency and Effectiveness in comprehensive universities*." I politely request you to respond the following questions honestly to the best of your knowledge. Be assured that all the information you will give is appreciated and treated with confidentiality and used only for the intended academic purpose. Your honest responses will contribute greatly to the success of the study. Your objectivity and cooperation will be highly appreciated. Thank you for your cooperation in completing and returning the questionnaire.

Manaye Abera

Please contact me: by Mobile: 0912150254/0712949434, or via email: manayeabera2@gmail.com

Part.1. Demographic Information (Note: Please Put "X" in the boxes you selected)

1.1. Sex: 1. Male ☐ 2. Female ☐

1.2. Experience in current university: 1. < 5 ☐ 2. 6-10 ☐ 3. 11-15 ☐ 4. 16-20 ☐ 5.21-25 ☐

1.3. Total work experience (in years): 1. < 5 ☐ 2. 6-10 ☐ 3. 11-15 ☐ 4. 16-20 ☐ 5.21-25 ☐ 6.>25 ☐

1.4. Position in the University: 1. Academic position ☐ 2. Administration position ☐ 3.senior expe ☐

1.5. Current qualification 1. Diploma/Level ☐ 2. B.A. /BSC ☐ 3.M.A/MSC ☐ 4. PhD ☐

1.6. Academic Rank (if academic staff): 1. G.A ☐ 2. Lecturer ☐ 3. Assis. Prof. ☐ 4. Assoc. Prof. ☐ 5. Prof. ☐

1.7. Field of study ----------

1.8. Any special training received to planning & strategic management 1. Yes ☐ 2 No ☐

Part II: Research Questionnaires

Theme .1 Environmental Scanning

RQ1.*How do Comprehensive public universities in Ethiopia practice Environmental scanning*

1.1. The Practice of Environmental scanning/situation analysis **(**please**,** put "X in the appropriate number you choose on the scale below. 1**.** Strongly disagree 2. Disagree. 3. Moderate. 4. Agree. 5. Strongly agree

	To what extent does the environmental scanning of your university/college/department being conducted?	1	2	3	4	5
1	The university systematically conducts SWOT analysis to develop strategies and make decision.					
2	PESTEL factors are regularly analyzed during the university's strategy development process.					
3	The university evaluates its unique resources and capabilities to identify and sustain competitive advantages.					
4	The university regularly assesses students' academic and support needs when formulating institutional strategies.					
5	The university systematically assesses the needs and expectations of key internal and external stakeholders.					
6	National higher education policies and emerging educational trends are analyzed to guide the university's strategic direction.					

Theme 2 Strategy Formulation

RQ.2. How do the comprehensive universities in Ethiopia develop strategies?

2.1.The Practice of strategy formulation (please, put "X in the appropriate number you choose on the scale below. (1. Strongly disagree 2. Disagree. 3. Moderate. 4. Agree. 5. Strongly agree)

	How does strategy formulation was practiced in your university/college and department?	*1*	*2*	*3*	*4*	*5*
1	The university has a clearly articulated strategic mission that guides long-term decision-making					
2	Strategic goals are clearly defined and aligned with the university's mission and vision					
3	Multiple strategic alternatives are systematically developed before final strategic decisions are made					
4	The university uses clear criteria to select strategies that best support its strategic priorities					
5	Strategic plans include clear quantitative targets to measure progress and performance.					
6	Strategic objectives are specific, measurable, achievable, relevant, and time-bound.					
7	Strategic tasks are clearly prioritized based on institutional goals and available resources.					
8	Adequate financial, human, and physical resources are allocated to support strategic initiatives.					

2.2:The practices of Communicating the Strategy (please**,** put "X in the appropriate number you choose on the scale below ***(***1**.** Strongly disagree 2. Disagree. 3. Moderate. 4. Agree. 5. Strongly agree)

	To what extent does the university use appropriate and effective communication mechanisms to disseminate strategies at your university?	*1*	*2*	*3*	*4*	*5*
1	Strategies and key strategic information are effectively communicated to staff through email					
2	Phone conversations are used to clarify and reinforce strategic decisions.					
3	Official letters are used to formally communicate strategic directives and policy decisions					
4	Conferences and regular meetings are used to communicate and discuss strategies and progress.					
5	The university website is used to disseminate strategies and related information to stakeholders.					
6	Institutional strategies are clearly cascaded from top management to					

	colleges and departments.					
7	Regular reports are used to communicate progress on strategic implementation.					
8	Virtual meeting platforms and webinars are effectively used to communicate strategic issues and updates.					

2.3. The approaches to develop Strategies *(*Please Put "X in the appropriate number you choose on the scale below**. (***1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree***)**

	To what extent does the university apply appropriate approaches to develop strategies?	1	2	3	4	5
1	Strategy development in the university is primarily driven through top-down approach (top management decisions)					
2	Strategy development in the university is mainly driven by bottom-up approach					
3	The university balances top-down and bottom-up approaches in developing its strategies.					
4	Strategy development in the university is largely guided by directives and frameworks from the Ministry of Education.					

Theme 3. The practice of Strategy implementation

RQ.3. How does strategies are implemented efficiently and effectively in public universities in Ethiopia?

3.1. The efficiency and effectiveness of strategy implementation *(*Please Put "X in the appropriate number you choose on the scale below**. (***1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree***)**

	How does the university implement its strategies efficiently and effectively?	***1***	***2***	***3***	***4***	***5***
1	Authority and decision-making responsibilities are appropriately delegated to lower-level managers to support strategy implementation.					
2	The university restructures its organizational arrangements when necessary to facilitate effective strategy implementation.					
3	Clear policies and operational guidelines are developed to support the implementation of strategies					
4	Employees are rewarded and recognized for their contribution to successful strategy implementation.					
5	Adequate financial, human, and material resources are allocated to					

	ensure effective strategy implementation.					
6	Principles of change management are actively applied to manage resistance and support strategy implementation.					

3.2. Critical Success/contributing factors for strategy implementation in public universities ***(***Please Put "X in the appropriate number you choose on the scale below**. (**1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree***)***

	How does the university identify critical success factors that influence efficient and effective implementation of its strategies?	1	2	3	4	**5**
1	Strong and committed leadership positively influences the efficient and effective implementation of strategies in the university.					
2	Continuous improvement practices are implemented to enhance the efficiency and effectiveness of strategy execution.					
3	Meeting the needs and expectations of students and other stakeholders is a key factor in successful strategy implementation.					
4	Active involvement of employees and stakeholders significantly contributes to the successful implementation of strategies.					
5	Providing training and career development opportunities enhances the capability of staff to implement strategies effectively.					
6	Clear and effective communication supports the smooth and efficient implementation of strategies.					
7	Teamwork and collaboration among staff and departments enhance the success of strategy implementation					
8	Rewarding and recognizing employees motivates and improves the effectiveness of strategy implementation.					
9	Adequate allocation of financial, human, and material resources is critical for efficient and effective strategy implementation.					
10	Strategies that strengthen the university's competitive advantage contribute to more effective implementation.					

Theme 4. Monitoring & Evaluation

RQ.4. How are strategic management practices monitored and evaluated in comprehensive universities

4.1.The Practices of Monitoring and Evaluation (please, put "X in the appropriate number you choose on the scale below 1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree***)***

	How does the university implement performance management and	***1***	***2***	***3***	***4***	***5***

	monitoring and evaluation practices effectively?					
1	The university effectively develops and sets clear performance indicators that align with its strategic objectives.					
2	Relevant stakeholders are actively involved in the monitoring and evaluation processes to ensure comprehensive performance assessment.					
3	The university conducts regular and systematic performance evaluations to track progress against established objectives					
4	Performance evaluation outcomes are consistently discussed in meetings, and constructive feedback is provided to relevant personnel.					
5	Performance data and reports are collected on a regular basis to inform decision-making and continuous improvement.					
6	The university takes timely and appropriate corrective actions based on performance evaluation results to improve outcomes.					

4.2. Internal challenges affecting the adoption and implementation of SM practices (Please Put "X in the appropriate number you choose on the scale below**.** 1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree***)***.

	How does the university effectively address internal challenges that affect strategy implementation?	***1***	***2***	***3***	***4***	***5***
1	Top managers possess the necessary skills, knowledge, and experience to effectively envision and develop organizational strategies.					
2	The university structure is well-aligned to support the successful implementation of strategies					
3	Adequate resources are allocated to ensure smooth and effective strategy implementation.					
4	University structures and culture support efficient decision-making and minimize bureaucratic obstacles.					
5	Staff development programs are sufficient to equip employees with the skills and knowledge required for strategy implementation.					
6	Effective communication exists between departments and across hierarchical levels to facilitate strategy execution.					
7	The university has a robust reward and motivational system that encourages employees to contribute to strategy implementation.					
8	Top management demonstrates strong commitment and support for the successful implementation of strategies.					
9	The university maintains stable staffing levels, minimizing disruptions to strategy implementation.					
10	Employees are actively engaged and participate meaningfully in strategy implementation processes.					

4.3. External challenges affecting the adoption and implementation of SM practices (Please Put "X in the appropriate number you choose on the scale below**.** 1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree***)***.

	How does the university effectively manage external challenges that affect strategy implementation	***1***	***2***	***3***	***4***	***5***
1	The university effectively anticipates and responds to uncertainties in the external environment.					
2	The university proactively manages and mitigates the impact of economic inflation on its strategic objectives.					
3	The university adapts efficiently to a dynamic and rapidly changing external environment					
4	The university successfully navigates frequent changes in policies and regulations to maintain strategic progress.					
5	The university effectively leverages current technology to support strategy implementation.					

If you have any other suggestions regarding the challenges(internal & external) affecting the implementation SM practice in your university, please indicate in the space provided below.------
---

4.4. Strategic measures to be undertaken to solve the challenges *(*Please Put "X in the appropriate number you choose on the scale below**. (**1. Strongly disagree 2. Disagree 3. Moderate 4. Agree 5. Strongly agree**)**

	How does the university implement strategies and measures to effectively overcome obstacles and strengthen strategic management outcomes?	1	2	3	4	5
1	The university ensures accountability, transparency, and an objective decision-making process that is effectively devolved to the functional level.					
2	The university strengthens governance and institutional management through inclusive and participatory governance models.					
3	The university actively improves organizational capacities and engages stakeholders across research, staff, and student support, financial, academic, and psycho-social functions.					
4	The university ensures institutional autonomy and protects academic freedom to facilitate strategic objectives.					
5	The university aligns its strategic goals with national priorities and community needs.					
6	The university develops and applies clear indicators to measure the efficiency and effectiveness of its strategic management practices.					
7	The university provides adequate infrastructure and ICT facilities that support fit-for-purpose strategy implementation					

8	The university implements a performance-based funding formula that aligns with strategic management practices.					
9	The university actively leverages the advisory role and duties of its governing board to support strategy implementation.					
10	The university has developed and communicates an aspirational shared vision that guides all strategic initiatives.					

THANK YOU VERY MUCH

***Annex 2*.**

An Interview guide for target Universities Top, Middle level Managers & development planning and budget Unit Heads

For a sequential explanatory mixed-methods design (QUAN → QUAL), the qualitative interview should explain, elaborate, and provide reasons for the quantitative findings, rather than repeat what was measured in the survey. Below are interview questions aligned with each strategic management practice dimension.

SM Practice Component	Qualitative Interview Questions
1. Environmental Scanning	**1.** The survey findings indicate that environmental scanning practices are moderately implemented but insufficiently institutionalized across comprehensive universities. In your view, what organizational, leadership, and resource-related factors hinder the institutionalization of systematic environmental scanning? **2.** How are internal and external environmental changes currently identified and incorporated into strategic planning and institutional decision-making, and what challenges affect this process?
2. Strategy Formulation	**3.** The quantitative findings revealed weak and inadequately institutionalized strategy formulation practices. What factors contribute to these weaknesses in strategic planning within your university? **4.** How does the current strategy formulation process, including stakeholder participation and leadership involvement, influence ownership, commitment, and successful implementation of institutional strategies?
3. Strategy Communication	**5.** The survey findings suggest that universities rely mainly on conventional communication mechanisms while underutilizing digital communication platforms. Why does this occur, and what barriers limit the

	adoption of modern communication systems? **6.** How does the current strategy communication system influence employees' awareness, participation, and commitment to implementing institutional strategic plans?
4. Strategy Implementation	**7.** Quantitative findings indicate moderate-to-low levels of strategy implementation. What are the major organizational, leadership, financial, and human resource factors that hinder effective implementation of institutional strategies? **8.** In your experience, why do some strategic initiatives fail to achieve their intended objectives despite the existence of formal strategic plans?
5. Critical Success Factors for Strategic Management	**9.** The survey findings show that the efficiency and effectiveness of strategic management practices vary considerably across universities. What factors do you consider most critical for successful implementation of strategic management practices? **10.** What improvements in leadership, organizational capacity, resource allocation, employee engagement, or governance would strengthen the effectiveness of strategic management practices in comprehensive universities?
6. Monitoring and Evaluation	**11.** The quantitative findings indicate that monitoring and evaluation practices are only moderately implemented. What organizational or institutional factors limit the effectiveness of monitoring and evaluation systems in your university? **12.** How are monitoring and evaluation findings utilized for organizational learning, accountability, evidence-based decision-making and corrective action during strategy implementation?

THANK YOU VERY MUCH

Annex 3.

FGDs guide for student's Union at Target Universities

1. How do you describe your involvement in your university strategy formulation?

2. How well do you think the university strategy is being communicated?

3. How well do you think the university strategy is being monitored?

4. Can you identify the challenges faced in the university strategy implementation?

5. From your views, what will be the important elements in implementing the University strategy?

6 From your personal opinion, what do you think about the whole strategic management process of the university?

7 What can be done in order to improve SM practice further?

THANK YOU VERY MUCH!