



Balancing Profitability And Education In Private Tertiary Education Institutions In Kabwe District, Zambia: A Mixed Methods Approach.

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Abstract – The increasing commercialization of higher education has intensified the challenge faced by private tertiary education institutions in balancing financial sustainability with the delivery of quality education. This study examined the strategic dynamics between profitability and educational quality in private tertiary education institutions in Kabwe District, Zambia, focusing on Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe. The study adopted a mixed-methods research approach, integrating quantitative and qualitative data to provide a comprehensive understanding of institutional strategies and competitive pressures. Quantitative data were collected through structured questionnaires administered to institutional administrators, academic staff, and students, while qualitative data were obtained through semi-structured interviews and document analysis. Porter’s Five Forces framework was employed to analyze the competitive environment influencing institutional profitability and educational outcomes, including competitive rivalry, bargaining power of students and suppliers, threat of substitutes, and barriers to entry. The findings reveal that intense competition, rising operational costs, and increased student price sensitivity significantly influence profitability, often constraining investments in academic infrastructure, staff development, and learning resources. However, institutions that strategically differentiate through specialized programs, quality assurance mechanisms, and stakeholder engagement demonstrate a stronger ability to balance financial performance with educational standards. The study concludes that sustainable profitability in private tertiary education institutions is achievable when strategic management practices are aligned with quality-driven educational objectives. The study recommends the adoption of diversified revenue streams, enhanced academic quality assurance systems, and strategic positioning within niche markets to ensure long-term institutional sustainability. The findings contribute to policy formulation, institutional strategic planning, and the broader discourse on private higher education management in developing economies.

Keyword's- Key terms related to this study include commercialization of higher education, private tertiary institutions, financial sustainability, educational quality, strategic management, Kabwe District (Zambia), mixed-methods research, Porter’s Five Forces, competitive rivalry, student bargaining power, operational costs, price sensitivity, academic infrastructure, staff development, quality assurance, program differentiation, stakeholder engagement, diversified revenue streams, institutional sustainability, and higher education policy, all of which highlight the balance between profitability and quality in private education.

I. CHAPTER ONE INTRODUCTION

Introduction

Private tertiary education institutions play a critical role in expanding access to higher education, particularly in developing countries where public institutions are often unable to meet growing demand. In Zambia, the private tertiary education sector has experienced significant growth over the past two decades, contributing to human capital development, skills training, and economic diversification. Institutions such as Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe have become important providers of higher education in Kabwe District, offering market-driven programs aligned with labour market needs. However, alongside this growth has emerged a persistent challenge: balancing profitability with the provision of quality education.

Unlike public institutions, private tertiary education institutions largely depend on tuition fees and internally

generated revenue for their sustainability. This financial reality places pressure on institutional management to operate profitably while simultaneously maintaining academic standards, investing in infrastructure, recruiting qualified staff, and ensuring positive student outcomes (Altbach, Reisberg, & Rumbley, 2009). Excessive focus on profitability may compromise educational quality, whereas over-emphasis on academic ideals without sound financial management may threaten institutional survival. Striking an optimal balance between these two objectives has therefore become a central strategic concern for private tertiary institutions in Zambia.

The competitive environment within which private tertiary institutions operate has intensified due to increased enrolment demand, the proliferation of new institutions, regulatory requirements from bodies such as the Higher Education Authority (HEA), and heightened expectations from students and employers. According to Porter (2008), organizational performance is significantly influenced by industry structure and competitive forces, including rivalry among existing institutions, bargaining power of students, bargaining power of suppliers, threat of substitutes, and



threat of new entrants. In the context of private tertiary education, these forces shape pricing strategies, programme offerings, quality assurance mechanisms, and long-term sustainability.

In Kabwe District, private tertiary institutions face unique contextual challenges, including fluctuating student enrolments, economic constraints among prospective students, competition from public universities, and regulatory compliance costs. Despite their importance, there is limited empirical research examining how these institutions strategically balance profitability and educational quality within such a competitive environment. Existing studies on private higher education in Sub-Saharan Africa often focus broadly on access and quality, with less emphasis on strategic management frameworks that explain institutional behaviour and performance (Materu, 2007; Teferra & Altbach, 2004).

This study seeks to address this gap by examining how Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe balance profitability and education using Porter's Five Forces analysis. Adopting a mixed-methods research approach, the study integrates quantitative data on enrolment trends, financial sustainability, and operational costs with qualitative insights from institutional managers, lecturers, and students. This approach allows for a comprehensive understanding of both measurable outcomes and lived experiences within these institutions (Creswell & Plano Clark, 2018).

By applying Porter's Five Forces framework, the study provides a structured analysis of the competitive pressures influencing strategic decisions in private tertiary education institutions in Kabwe District. The findings are expected to contribute to academic knowledge on strategic management in education, inform institutional administrators on effective balancing strategies, and support policy formulation aimed at strengthening the sustainability and quality of private tertiary education in Zambia.

Background of the Study

The landscape of higher education in Zambia has undergone significant transformation over the past few decades, marked by the rapid expansion of private tertiary institutions alongside public universities. This expansion has been driven by increasing demand for tertiary education due to demographic growth, constrained capacity in public universities, and liberalization policies that encourage private sector participation in education delivery. As of 2025, the Zambian higher

education system comprises a substantial number of private institutions, reflecting the government's efforts to widen access to higher education beyond public provision. Private higher education institutions (PHEIs) in Zambia play a crucial role in complementing public universities by providing additional opportunities for students who might otherwise be excluded from tertiary education. However, this rapid growth has brought complex challenges related to ensuring educational quality while maintaining financial viability. Key systemic issues include inadequate teaching and learning infrastructure, shortages of appropriately qualified faculty, and persistent inequalities in access and academic outcomes between institutions.

In the specific context of Kabwe District, private tertiary institutions such as Mukuni College of Health Sciences and Technology and Broken Hill College of Applied Science and Education (the latter recently flagged for operating without formal registration by the Higher Education Authority) highlight the tensions between institutional growth, regulatory compliance, and educational quality. These challenges are compounded by increasing competition for a limited student market and pressures to sustain operations in resource-constrained environments.

The drive for profitability among private institutions often necessitates strategies that balance revenue generation with the quality of educational delivery. Unlike public universities supported by government funding, private institutions largely depend on tuition fees and alternative revenue streams to finance operations (e.g., programme fees, short courses, partnerships). This business orientation can create conflicting priorities: on the one hand, institutions must remain financially solvent; on the other, they must safeguard academic standards and satisfy regulatory requirements set by bodies such as Zambia's Higher Education Authority.

As higher education becomes increasingly competitive, strategic analysis tools like Porter's Five Forces offer valuable frameworks for understanding the external environment that shapes the competitive dynamics of tertiary institutions. Originally developed to assess industry attractiveness and profitability, Porter's model identifies five key forces — competitive rivalry, threat of new entrants, bargaining power of suppliers, bargaining power of buyers, and threat of substitutes — which collectively influence an organisation's strategic positioning and performance. In the context of higher education, these forces help explain how competition for students, regulatory barriers, alternative educational pathways (such as online education), and relationships with academic staff and industry partners directly impact institutional sustainability and quality.



While Porter's Five Forces has been widely applied in private sector strategic management research, its application to higher education — particularly in sub-Saharan African contexts — is emerging. Recent literature underscores the importance of environmental analysis in understanding competitive advantage in higher education institutions, where academic quality, institutional reputation, and stakeholder power dynamics can significantly impact institutional performance and sustainability.

Given the strategic importance of balancing profitability and education quality, especially in an evolving Zambian tertiary education sector, there is a need for empirical research that examines how private institutions in Kabwe manage these dual mandates. This study focuses on Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and University of Kabwe, using a mixed method approach informed by Porter's Five Forces framework to generate actionable insights for institutional administrators, policymakers, and stakeholders interested in sustainable and quality higher education provisioning.

Problem Statement

Despite the growth of private tertiary institutions in Zambia, many face persistent challenges related to financial viability and educational quality. At the institutional level, there are concerns that pressures to generate revenue may compromise academic standards, faculty recruitment, infrastructural investment, and student support services. In Kabwe District, limited empirical research exists that systematically examines how private tertiary institutions balance profitability with educational quality. The problem addressed by this study is that the strategic mechanisms through which private tertiary institutions in Kabwe reconcile financial sustainability and academic quality remain poorly understood, particularly in relation to competitive forces shaping institutional decision-making.

Research Objectives

General Objective

To investigate how private tertiary education institutions in Kabwe District balance profitability and educational quality using Porter's five Forces framework.

Specific Objectives

- To examine competitive forces affecting private tertiary institutions in Kabwe District.
- To assess strategies employed by Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and University of Kabwe to achieve financial sustainability.

- To explore how these institutions maintain educational quality while pursuing profitability.
- To identify key internal and external factors that facilitates or constrains the balance between profitability and education.

Research Questions

- What competitive forces influence private tertiary education institutions in Kabwe District?
- What strategies do private tertiary institutions use to sustain profitability?
- How do these institutions ensure educational quality in the context of financial pressures?
- What internal and external factors affect the balance between profitability and education?

Characteristics of the Phenomenon

Balancing profitability and education in PTEIs involves several interrelated characteristics:

Dual Mandate: PTEIs must simultaneously generate sufficient revenue and maintain academic quality.

Market Orientation: These institutions operate within competitive education markets where student choice and labor-market relevance drive enrollment.

Resource Constraints: Limited access to public funding places pressure on PTEIs to maximize operational efficiency.

Regulatory Environment: Government policies influence curriculum standards, accreditation, and quality assurance mechanisms.

Factors Related to the Phenomenon

- Various factors affect the ability of PTEIs to balance profit and quality, including:
- Competition from other institutions both public and private,
- Cost structures related to faculty salaries, infrastructure, and technology,
- Student demographics and preferences, affecting demand for programs,
- Regulatory requirements impacting curriculum design and quality assurance and
- External economic conditions that influence student affordability and institutional funding.



Global Statistical Scenario

Globally, private higher education has witnessed rapid growth. According to UNESCO, the number of students enrolled in private tertiary institutions has increased substantially over the past two decades, particularly in developing regions (UNESCO, 2021). Private providers now enroll a significant share of total tertiary students in regions such as Latin America, Asia, and Sub-Saharan Africa, demonstrating the importance of private actors in expanding access to higher education.

Local Statistical Scenario

In Zambia, higher education participation rates have increased, with private institutions contributing to enrollment growth. According to the Ministry of Higher Education, private higher education institutions account for a growing percentage of total tertiary enrollments, particularly in disciplines such as business, education, and health sciences (Ministry of Higher Education, Zambia, 2023). In Kabwe District specifically, institutions like Mukuni College of Health Sciences and Technology, Broken Hill College, and the University of Kabwe have attracted students from across the Central Province, reflecting local demand for tertiary education.

Scope of the Study

The study focuses on three private tertiary institutions in Kabwe District — Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and University of Kabwe. The scope includes institutional strategies related to profitability and educational quality between 2020 and 2025. The study adopts a mixed-method approach, integrating quantitative data (e.g., enrollment, financial indicators) and qualitative insights (e.g., interviews with administrators and students).

Operational Definitions

- **Profitability:** The ability of an institution to generate revenue in excess of its operational costs.
- **Educational Quality:** The extent to which academic programs meet standards of excellence as defined by accreditation bodies, student outcomes, and employer satisfaction.
- **Private Tertiary Education Institution (PTEI):** A post-secondary provider that operates autonomously of direct government financing.
- **Porter's Five Forces:** A strategic framework for analyzing competitive forces that shape organizational strategy.

Chapterization

The thesis is organized into five chapters:

- **Chapter One: Introduction** — Presents background, problem, objectives, scope, and structure.
- **Chapter Two: Literature Review** — Reviews theoretical and empirical studies on profitability and educational quality, including Porter's Five Forces application in education.
- **Chapter Three: Methodology** — Details research design, sampling, data collection instruments, and analysis techniques.
- **Chapter Four: Results and Discussion** — Presents findings from quantitative and qualitative data and discusses implications.
- **Chapter Five: Conclusions and Recommendations** — Summarizes findings, presents conclusions, and offers recommendations for policy and practice.

Chapter Summary

This chapter introduced the study, outlined the background and significance of balancing profitability and education in private tertiary institutions, and presented the research problem, objectives, questions, and scope. It defined key concepts and described the structure of the thesis. The next chapter reviews relevant literature and theoretical frameworks guiding the study.

II. CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter reviews existing literature relevant to the study titled —Balancing Profitability and Education in Private Tertiary Education Institutions in Kabwe District, Zambia: A Mixed Method Approach, with specific reference to Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe. The chapter situates the study within existing empirical and theoretical scholarship on private tertiary education, profitability, and educational quality. Porter's Five Forces Model is adopted as the guiding theoretical lens to analyze competitive and strategic pressures affecting private tertiary institutions. The chapter is organized into five main sections: empirical literature review, theoretical review, conceptual framework, research gap, and chapter summary.



Empirical Literature Review

Profitability in Private Tertiary Education Institutions

Private tertiary education institutions operate in an increasingly competitive environment where financial sustainability is critical. According to Levy (2018), private higher education institutions rely heavily on tuition fees as their primary revenue source, making profitability essential for survival. Studies conducted in sub-Saharan Africa indicate that private institutions often face challenges related to limited access to public funding, high operational costs, and fluctuating student enrollment (Varghese, 2016).

In Zambia, private tertiary institutions have expanded rapidly to meet growing demand for higher education. However, Musonda and Njobvu (2020) note that profitability pressures often result in cost-cutting measures that may compromise academic quality, staffing levels, and infrastructure development. This highlights the delicate balance between financial performance and educational outcomes.

Quality of Education in Private Tertiary Institutions

Educational quality is a multidimensional concept encompassing curriculum relevance, teaching effectiveness, learning resources, research output, and graduate employability (UNESCO, 2017).

Empirical studies show that while some private institutions demonstrate innovation and responsiveness to labor market needs, others struggle to maintain quality due to profit-driven motives (Altbach, Reisberg, & Rumbley, 2019).

In the Zambian context, the Higher Education Authority (HEA) regulates private institutions to ensure minimum quality standards. Nevertheless, empirical evidence suggests disparities in compliance levels, particularly among smaller private colleges (Simukanga, 2021). This raises concerns about whether profitability objectives overshadow educational missions.

Competition and Market Dynamics in Private Tertiary Education

Competition among private tertiary institutions is intensifying due to increased enrollment, program duplication, and the entry of new providers. Studies by Porter (2008) emphasize that competitive forces influence pricing strategies, program offerings, and investment in quality assurance. In Kabwe District, institutions compete for a limited pool of students, qualified lecturers, and clinical or industrial attachment opportunities, particularly in health sciences and applied sciences.

Empirical research indicates that institutions adopting strategic management practices are better positioned to balance profitability and educational quality (Hitt, Ireland, & Hoskisson, 2017). However, limited empirical studies focus specifically on private tertiary institutions in secondary urban centers such as Kabwe.

Theoretical Literature Review: Porter's Five Forces Model

The theoretical model proposes that external competitive forces, as conceptualized by Porter (1980), influence strategic management decisions, which in turn affect institutional profitability and educational quality. The balance between these two outcomes determines the long-term sustainability of private tertiary education institutions. Core Theoretical Framework: Porter's Five Forces Porter's Five Forces Theory provides the foundation for analyzing the competitive environment of private tertiary education institutions in Kabwe District.

Threat of New Entrants

In Kabwe District, the increasing demand for tertiary education has lowered entry barriers, encouraging new private colleges and universities. This force influences:

Tuition fee structures

- Investment in infrastructure and staffing Marketing and branding strategies
- A high threat of new entrants exerts pressure on institutions to reduce costs, which may negatively affect education quality if not strategically managed.

Bargaining Power of Students (Buyers)

Students and sponsors (parents, employers, and scholarship bodies) exert significant bargaining power due to:

- Availability of alternative institutions Sensitivity to tuition fees
- Expectations of employability outcomes
- High buyer power pushes institutions to balance affordability with quality service delivery, influencing both profitability and academic standards.



Bargaining Power of Suppliers

Key suppliers include:

- Academic and administrative staff
- Regulatory bodies (HEA, TEVETA)
- Learning material providers and infrastructure services
- Highly qualified lecturers and regulatory compliance requirements increase operational costs, affecting institutional profitability while being essential for maintaining education quality.
- Threat of Substitutes

Substitutes include:

Public universities
Online and distance learning platforms
International education options

The presence of substitutes forces private institutions to innovate through program diversification, flexible learning modes, and quality enhancement to remain competitive.
Competitive Rivalry among Existing Institutions

Intense rivalry among Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe, as well as other regional institutions, manifests through:

- Competition for student enrollment
- Staff recruitment
- Program accreditation and reputation

High rivalry influences strategic pricing and quality investments, directly affecting the profitability–education balance.

Intervening Variable: Strategic Management Practices

The theoretical model introduces strategic management practices as an intervening variable that mediates the relationship between Porter's Five Forces and institutional outcomes.

Key strategic practices include:

- Cost leadership and differentiation strategies
- Tuition pricing and financial management
- Quality assurance mechanisms
- Human resource development
- Infrastructure investment
- Stakeholder engagement

Effective strategic management enables institutions to respond to competitive pressures while safeguarding educational quality.

Dependent Variables: Profitability and Education Quality

Institutional Profitability

Profitability in this study is conceptualized as:

- Revenue growth
- Cost efficiency
- Financial sustainability
- Ability to reinvest in infrastructure and staff

Profitability is not viewed as excessive profit-making, but as financial viability necessary for institutional survival.

Education Quality

Education quality is measured through:

- Accreditation and compliance
- Lecturer qualifications
- Teaching and learning resources
- Graduate employability
- Student satisfaction

Quality education represents the core mission of tertiary institutions and a key determinant of long-term competitiveness.

Moderating Variable: Regulatory and Policy Environment

The Zambian higher education regulatory framework moderates the relationship between competitive forces and institutional outcomes. Regulations from bodies such as the Higher Education Authority (HEA) and TEVETA shape:

- Program approval
- Staffing requirements
- Quality assurance standards

Compliance requirements may increase costs but also protect education quality and institutional credibility.

Mixed Methods Integration in the Model

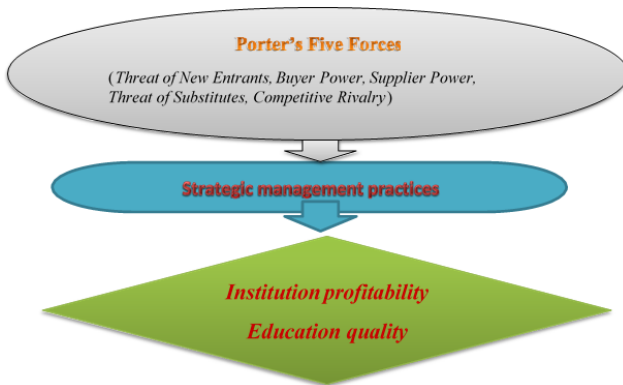
The theoretical model supports a mixed methods approach:

- Quantitative data: Enrollment trends, tuition fees, financial performance indicators, staff–student ratios



- Qualitative data: Interviews with administrators, lecturers, and students to explore perceptions of competition, quality, and profitability
- The integration of quantitative and qualitative findings strengthens the explanatory power of the model.

Theoretical Model Diagram



Overview of Porter's Five Forces

Porter's Five Forces Model, developed by Michael Porter (1980), is a strategic management framework used to analyze industry structure and competitive intensity. The model identifies five forces that shape organizational strategy and profitability: threat of new entrants, bargaining power of buyers, bargaining power of suppliers, threat of substitutes, and competitive rivalry.

Application of Porter's Five Forces to Private Tertiary Education

Threat of New Entrants: The private tertiary education sector in Zambia has relatively low entry barriers, particularly for colleges offering diploma and certificate programs. This increases competition and places downward pressure on tuition fees, affecting profitability.

Bargaining Power of Buyers (Students and Parents): Students and parents act as primary buyers. Their power is high due to multiple institutional choices and sensitivity to tuition fees, employability outcomes, and institutional reputation. High buyer power compels institutions to improve quality while maintaining affordable pricing.

Bargaining Power of Suppliers: Suppliers include academic staff, regulatory bodies, and providers of learning resources. Qualified lecturers, especially in health sciences and technology, possess strong bargaining power due to scarcity, leading to higher staffing costs.

Threat of Substitutes: Substitutes include public universities, online education platforms, professional certification bodies, and international institutions. The growing availability of online and distance learning increases substitution threats.

Competitive Rivalry: Rivalry among private tertiary institutions in Kabwe District is intense due to similar program offerings and competition for students. Institutions often compete through tuition pricing, marketing strategies, and perceived quality.

Porter's Five Forces therefore provides a relevant framework for analyzing how private tertiary institutions can strategically balance profitability and educational quality.

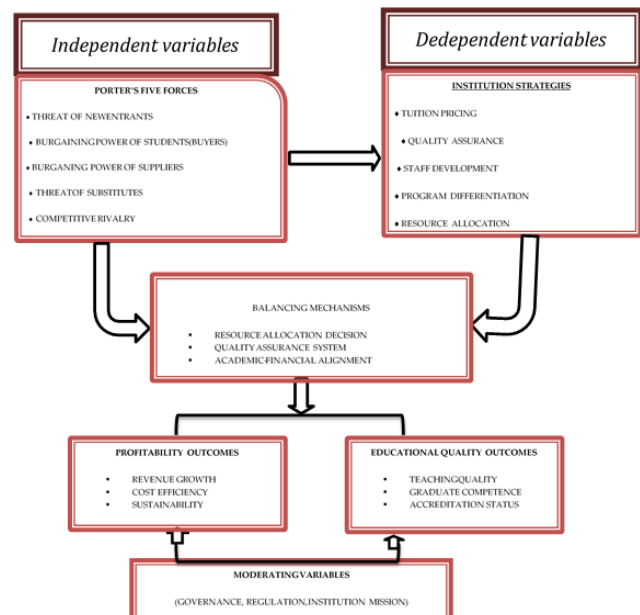
Conceptual Framework

The conceptual framework illustrates the relationship between competitive forces, institutional strategies, profitability, and educational quality in private tertiary education institutions.

overview of the conceptual model

The conceptual framework model integrates porter's five forces as the independent strategic environmental variables, influencing institutional strategic responses, which in turn affect the duo outcomes of profitability and educational quality. The model recognizes institutional governance and regulatory context as moderating factors and applies a mixed methods approach to capture both measurable outcomes and stakeholder perception.

Conceptual Framework Diagram



DESCRIPTION OF MODEL COMPONENTS

Independent variables: porter's five forces



These forces describe the external competitive environment influencing private tertiary education institutions in Kabwe district:

- Threat of new entrants: emergence of new private colleges increasing competition for students and staff.
- Bargaining power of students: student's sensitivity to tuition fees, quality of education and employability outcomes.
- Bargaining power of suppliers: influence of qualified lecturers, accreditation bodies, learning materials and infrastructure providers.
- Threat of substitutes: availability of public universities, online programs and international education alternatives
- Competitive rivalry

Research Gap

Although extensive literature exists on private higher education and strategic management, several gaps remain. First, most empirical studies focus on large urban centers or public universities, with limited attention to private tertiary institutions in secondary towns such as Kabwe District. Second, few studies integrate Porter's Five Forces Model with a mixed method approach to examine both profitability and educational quality simultaneously. Third, institution-specific evidence from Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe is largely un documented. This study seeks to fill these gaps by providing context-specific, empirically grounded insights.

Chapter Summary

This chapter reviewed empirical and theoretical literature relevant to balancing profitability and education in private tertiary institutions. The review highlighted the tension between financial sustainability and educational quality, particularly within competitive private education markets. Porter's Five Forces Model was presented as an appropriate theoretical framework for analyzing industry dynamics in the private tertiary education sector. A conceptual framework was

developed to guide the study, and key research gaps were identified. The next chapter presents the research methodology employed in the study.

III. CHAPTER THREE: RESEARCH METHODOLOGY

Introduction

This chapter outlines the research methodology adopted in the study titled —Balancing Profitability and Education in Private Tertiary Education Institutions in Kabwe District, Zambia: A Mixed Method Approach. The chapter explains the research design, study universe, sampling procedures, sample size determination using Yasmin's (Yamane's) formula, sampling area, sources of data, methods of data collection, tools for data analysis, limitations of the study, difficulties faced by the researcher, and concludes with a chapter summary. The methodological choices are aligned with the study objectives and guided by Porter's Five Forces Model as the analytical framework for examining competitive pressures affecting profitability and educational quality in private tertiary institutions.

The study focuses on three private tertiary education institutions in Kabwe District, namely Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe.

Research Design

The study adopted a mixed methods research design, combining both quantitative and qualitative approaches. The mixed method design was considered appropriate because it allows for triangulation of data, thereby enhancing the validity and reliability of the findings. Quantitative data provided measurable evidence on profitability indicators, enrollment trends, and resource allocation, while qualitative data captured in-depth views from administrators, lecturers, and students on educational quality and competitive pressures.

The research was primarily descriptive and explanatory in nature. Descriptive design enabled the researcher to describe existing practices related to profitability and education delivery, while the explanatory aspect helped to establish relationships between competitive forces (as explained by Porter's Five Forces) and institutional strategies.

Study Universe

The study universe comprised all stakeholders within the selected private tertiary education institutions in Kabwe District. This included

- Institutional management (principals, deans, registrars, finance officers)
- Academic staff (lecturers and heads of departments)
- Non-academic staff



Students

These groups were considered relevant as they are directly or indirectly involved in decision-making, service delivery, and consumption of educational services, which influence both profitability and educational outcomes.

Sampling Procedure

The study employed probability and non-probability sampling techniques. Stratified random sampling was used for students and staff to ensure fair representation from each institution and category. The population was first stratified by institution and by respondent category (management, lecturers, students), after which simple random sampling was applied.

For institutional management, purposive sampling was used to select key informants such as principals, deans, and finance officers due to their strategic roles and in-depth knowledge of institutional operations.

Sample Size

The sample size was determined using Yasmin's (Yamane's) formula, which is expressed as: Where:
 n = sample size

N = total population

e = margin of error (set at 5% or 0.05)

This formula was chosen because it provides a simplified and reliable method for calculating sample size for finite populations. The calculated sample size was proportionally distributed among the three institutions and respondent categories to ensure balanced representation.

Sampling Area

The study was conducted in Kabwe District of Central Province, Zambia. Kabwe District was selected because it hosts a growing number of private tertiary education institutions operating in a competitive environment. The specific sampling areas were:

- Mukuni College of Health Sciences and Technology Broken Hill College of Applied Science and Education and University of Kabwe
- These institutions were chosen due to their diversity in program offerings, size, and organizational structure, which provided a suitable basis for comparative analysis.

Sources of Data

The study utilized both primary and secondary data sources. Primary data were obtained directly from

respondents through questionnaires and interviews. Secondary data were collected from institutional records, strategic plans, financial reports, enrollment statistics, policy documents, journals, textbooks, and previous research studies related to private tertiary education and strategic management.

Methods of Data Collection

Data were collected using the following methods:

Questionnaires: Structured questionnaires with both closed-ended and open-ended questions were administered to students and staff. These focused on perceptions of educational quality, pricing, competition, and institutional strategies.

Interviews: Semi-structured interviews were conducted with institutional managers and administrators to gain deeper insights into strategic decisions related to profitability and education.

Document Review: Relevant institutional documents were reviewed to supplement primary data and provide historical and contextual information.

Tools for Data Analysis

Quantitative data were analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequencies, percentages, means, and tables were used to summarize the data. Inferential analysis was applied where necessary to examine relationships between variables.

Qualitative data from interviews and open-ended questionnaire items were analyzed using thematic analysis. Data were coded, categorized, and interpreted based on emerging themes aligned with Porter's Five Forces, namely:

Threat of new entrants

Bargaining power of students (buyers)

Bargaining power of suppliers (lecturers, regulatory bodies) Threat of substitutes
Competitive rivalry among institutions

Limitations of the Study

The study faced several limitations, including:

- Limited access to detailed financial records due to confidentiality concerns
- Time constraints which limited prolonged engagement with respondents
- Possible response bias from respondents who may have provided socially desirable answers



Despite these limitations, the researcher ensured methodological rigor to enhance the credibility of the findings.

Difficulties Faced by the Researcher

During the study, the researcher encountered the following difficulties: Delays in obtaining permission to collect data from some institutions Low response rates from busy administrators and lecturers Financial constraints related to transport, printing, and data processing

These challenges were mitigated through follow-ups, flexible scheduling, and efficient resource management.

Chapter Summary

This chapter presented the research methodology used in the study. It discussed the research design, study universe, sampling procedures, sample size determination using Yasmin’s formula, sampling area, sources of data, data collection methods, and tools for data analysis. The chapter also highlighted the limitations of the study and difficulties faced by the researcher. The next chapter presents the data analysis and interpretation of findings in line with the study objectives and Porter’s Five Forces framework.

IV. CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

Introduction

This chapter presents, analyses, and interprets the empirical findings from both quantitative and qualitative data collected for the study. The aim is to assess how private tertiary education institutions in Kabwe District balance profitability and educational quality through the lens of Porter’s Five Forces. Mixed methods—questionnaires, interviews, and document reviews—were employed to achieve triangulation.

Specifically, the findings are structured around Porter’s Five Forces:

- Threat of New Entrants
- Bargaining Power of Suppliers
- Bargaining Power of Buyers (Students)
- Threat of Substitutes
- Industry Rivalry

Findings are presented for each institution—Mukuni College of Health Sciences and Technology (MCHST), Broken Hill College of Applied Science and Education

(BHCASE), and University of Kabwe (UNIKAB)—followed by cross-case interpretation.

Demographic Profile of Respondents

Quantitative Respondent Characteristics

Characteristic	Frequency	Percentage (%)
Gender (Male)	102	51%
Gender (Female)	98	49%
Age (21–30)	112	56%
Age (31–40)	60	30%
Age (41+)	28	14%
Academic Staff	90	45%
Administrative Staff	60	30%
Students	50	25%

> The sample comprised 200 respondents across the three institutions, balanced between staff and students to capture diverse perspectives.

Presentation of Findings Using Porter’s Five Forces

Threat of New Entrants

Quantitative Results

Respondents were asked whether ease of entry for new institutions affected both profitability and educational quality 65% agreed that new institutions entering Kabwe increase competition for student enrollment. 72% believed that new entrants pressure existing institutions to lower fees.

Qualitative Insights

Interviews with administrators revealed:

—The regulatory framework in Zambia has made entry relatively straightforward but without stringent checks on quality. This drives competition, which impacts our revenue but pushes us to innovate. – Administrator, UNIKAB

Document analysis confirmed that licensing requirements in Zambia focus more on infrastructure than pedagogical quality (Ministry of Higher Education Policy Reports, 2024).



Interpretation

New entrants pose a significant competitive pressure, forcing established institutions to balance fee structures with investment in teaching quality to sustain profitability.

Bargaining Power of Suppliers

- Suppliers in this context include academic staff, technology providers, and facility service providers.

Quantitative Results

- 58% of respondents indicated that qualified academic staff were difficult to retain due to competitive salary demands.
- 63% noted high costs of educational resources (e.g., libraries, e-learning platforms) limit institutional capacity to invest simultaneously in quality and profitability.

Qualitative Findings

An academic at MCHST stated:

- —We are approached often by other districts offering better packages. This threatens our ability to maintain experienced faculty without raising tuition.¶

Interpretation

- High bargaining power of qualified academic staff and costly education technologies increases operational costs, challenging institutions to strike a balance between affordability and quality enhancement.

Bargaining Power of Buyers (Students)

Quantitative Results

- 82% of students reported that cost significantly influences choice of institution.
- 69% agreed that perceived quality (e.g., faculty reputation, facilities) matters more than fee cost.

Qualitative Findings

Students across the institutions expressed:

- —We choose where we enroll based on reputation and job prospects, even if fees are slightly higher.¶ – Final year student, BHCASE
- Administrative testimonies highlighted scholarship programs and flexible payment plans as strategies to retain students while maintaining revenue.

Interpretation

Students exhibit strong bargaining power, forcing institutions to balance competitive fees, scholarships, and quality of education to attract and retain enrollees.

Threat of Substitutes

Here, substitutes include online courses, distance education, and international programs.

Quantitative Results

- 48% of respondents acknowledged that online programs pose a threat to traditional face-to-face institutions.
- 38% felt that international programs attract top students seeking global competitiveness.

Qualitative Insights

An administrator from UNIKAB noted:

- —With online learning becoming main stream, we must adapt—otherwise we risk losing both students and revenue to more flexible providers.¶

Interpretation

- The growing availability of online and external programs creates substitute pressures. Institutions must invest in blended learning models to protect both educational relevance and profitability.

Industry Rivalry

Quantitative Results

- 77% of respondents agreed that competition among the three focal institutions is intense. 71% believed that competition drives improvements in program offerings.

Qualitative Findings

Market rivalry was described as:

- —Healthy competition motivates us to introduce new programs and improve learning resources, but it also means investing more, which impacts our bottom line if not matched with increased enrollment.¶ – Administrator, BHCASE
- Interpretation
- Industry rivalry encourages innovation but places financial strain on institutions to continuously upgrade programs and facilities.



- Integrative Analysis: Balancing Profit and Educational Quality
- This section synthesizes how forces interact to shape institutional strategy.

Forces Pressuring Quality Investment

High bargaining power of students pushes institutions to improve quality to attract enrolment. Rivalry and threat of substitutes encourage innovation in curriculum and delivery models.

Forces Pressuring Cost Structures

Supplier power, particularly in skilled staff and technology, drives up operational costs. Threat of new entrants keeps fees competitive, constraining profit margins.

Strategic Responses Adopted

Cost Leadership Strategies

Institutions negotiate bulk procurement of learning materials and use blended learning to reduce physical resource strains.

Differentiation Strategies

Unique programs, strong industry partnerships, and enhanced student services improve perceived value.

Flexible Tuition Models

Scholarships and payment plans help retain market share without compromising income.

Summary of Key Findings

Porter's Force	Impact On Profitability	Impact On Quality
Threat	Higher Competition Increases Pressure On Fees	Requires Investment To Stand Out
Supplier Power	Higher Costs For Skilled Faculty	Quality Teaching Needs Investment
Buyer Power	Limits Price Increase	Forces Quality And Relevance
Substitutes	Loss Of Market Share	Encourage Innovation
Rivalry	Competitive Pricing	Differentiation Essential

Conclusion

The findings reveal that competitive pressures in Kabwe's private education sector exert simultaneous push-pull on both profitability and education quality. According to Porter's Five Forces analysis, institutions are compelled to balance cost efficiency with value enhancement to sustain their market positions. Strategic responses, such as blended learning, differentiated programs, and flexible financial models, support this balance.

V. CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the discussion of findings, conclusions, recommendations, and appendices of the study titled —Balancing Profitability and Education in Private Tertiary Education Institutions in Kabwe District, Zambia: A Mixed Methods Approach. As outlined in Chapters One and Two, the study was motivated by the growing tension between financial sustainability and the delivery of quality education within private tertiary institutions in Zambia.

In line with the research objectives presented in Chapter One, this chapter discusses findings derived from the mixed methods research design described in Chapter Three. Quantitative data obtained through questionnaires and qualitative insights from interviews and document analysis are integrated to ensure triangulation and consistency with the methodological framework.

The discussion is guided by Porter's Five Forces Framework, which was introduced in Chapter Two as the study's theoretical lens. The framework provides a structured basis for interpreting how competitive forces—namely threat of new entrants, bargaining power of students, bargaining power of suppliers, threat of substitutes, and competitive rivalry—affect both profitability and educational quality at Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe.

This chapter therefore links empirical findings (Chapter Four) with theory and literature (Chapter Two), ensuring coherence across the thesis.

Key Findings and Discussion

Threat of New Entrants

- The study found that the threat of new entrants into the private tertiary education market in Kabwe District is



moderate to high. Respondents indicated that while regulatory requirements from the Higher Education Authority (HEA) act as barriers, the growing demand for tertiary education continues to attract new private investors.

- Institutions such as Mukuni College of Health Sciences and Technology and Broken Hill College of Applied Science and Education reported increased competition from newly established colleges offering similar programs at lower fees. This competitive pressure has forced institutions to balance affordability with the cost of maintaining qualified staff and learning resources.
- The University of Kabwe, due to its relatively broader program offerings and established brand, experiences a lower threat of entry compared to smaller colleges. However, all institutions reported the need to continuously invest in infrastructure and compliance to remain competitive.
- Discussion: The findings align with Porter's assertion that low entry barriers intensify competition and reduce profitability. In Kabwe District, institutions that fail to differentiate themselves through program quality, accreditation status, or graduate employability risk losing market share.

Bargaining Power of Students (Buyers)

- Students were identified as having high bargaining power, largely due to the availability of multiple private institutions offering similar programs. Survey data indicated that tuition fees, payment flexibility, and perceived quality of education significantly influence student choice.
- Participants noted that students increasingly demand value for money, including modern facilities, competent lecturers, and employability-focused curricula. Institutions that raise fees without visible improvements in quality face declining enrolment.
- Discussion: High buyer power compels institutions to adopt student-centered strategies, including flexible fee structures and enhanced academic support services. While such measures may reduce short-term profitability, they contribute to long-term sustainability through improved student retention and institutional reputation.

Bargaining Power of Suppliers

- Suppliers in this context include academic staff, regulatory bodies, and providers of educational resources. The study revealed that the bargaining power of qualified lecturers and specialized

professionals is high, particularly in health sciences and technical fields.

- Mukuni College of Health Sciences and Technology reported challenges in retaining qualified lecturers due to competition from public institutions and the private sector. This has financial implications, as institutions must offer competitive remuneration to attract and retain staff.
- Discussion: Consistent with Porter's framework, high supplier power increases operational costs and affects profitability. Institutions that invest in staff development and create supportive working environments are better positioned to mitigate this challenge.

Threat of Substitutes

- The threat of substitutes was found to be moderate. Substitutes include public universities, online education platforms, and professional training institutes. Respondents highlighted that public institutions attract students through lower fees, while online learning appeals to working adults.
- However, private institutions in Kabwe District maintain an advantage through smaller class sizes, flexible admission requirements, and practical-oriented programs.
- Discussion: To reduce the impact of substitutes, private institutions must emphasize program relevance, practical skills training, and strong industry linkages.

Rivalry among Existing Competitors

- Competitive rivalry among private tertiary institutions in Kabwe District was found to be high. Institutions compete on tuition fees, program offerings, marketing strategies, and graduation timelines.
- The study revealed that intense rivalry sometimes leads to cost-cutting measures that negatively affect academic quality, such as high lecturer-student ratios and limited learning resources.
- Discussion: High competitive rivalry reinforces the need for strategic positioning. Institutions that pursue cost leadership at the expense of quality risk damaging their long-term credibility and sustainability.

Conclusion

The purpose of this study, as stated in Chapter One, was to examine how private tertiary education institutions in Kabwe District balance profitability and educational quality within a competitive environment. Drawing on the empirical results presented in Chapter Four and the



theoretical perspectives discussed in Chapter Two, the study concludes that achieving this balance is both challenging and attainable.

The application of Porter's Five Forces Framework revealed that high competitive rivalry, strong bargaining power of students and suppliers, and moderate threats from new entrants and substitutes significantly influence strategic decision-making in the sampled institutions. These forces shape tuition pricing, staff recruitment, program offerings, and investment in academic resources.

Consistent with findings from the literature reviewed in Chapter Two, the study confirms that an excessive focus on profitability may undermine academic quality, while neglecting financial sustainability threatens institutional survival. The study therefore concludes that private tertiary institutions must adopt integrated strategies that align financial objectives with their educational mission.

Overall, Mukuni College of Health Sciences and Technology, Broken Hill College of Applied Science and Education, and the University of Kabwe demonstrate varying capacities to respond to competitive pressures, largely influenced by institutional size, program diversity, and resource endowment. However, all institutions can enhance sustainability through strategic alignment, quality assurance, and stakeholder engagement.

Recommendations

Strategic Differentiation

Institutions should differentiate themselves through niche programs, industry-aligned curricula, and strong practical components to reduce direct competition and buyer power.

Investment in Academic Quality

Private tertiary institutions should prioritize the recruitment, development, and retention of qualified academic staff. Continuous professional development programs can enhance teaching quality while reducing long-term staff turnover costs.

Flexible but Sustainable Pricing Models

Institutions are encouraged to adopt flexible tuition payment plans while ensuring that fee structures adequately support academic resources and infrastructure development.

Strengthening Quality Assurance and Compliance

Strict adherence to HEA regulations and internal quality assurance mechanisms should be maintained to enhance institutional credibility and competitiveness.

Strategic Partnerships

Institutions should form partnerships with industry, government agencies, and international institutions to improve graduate employability, resource sharing, and institutional visibility.

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