ANSOFF GROWTH STRATEGIES, FUNDING POLICY AND THE PERFORMANCE OF UNIVERSITIES IN KENYA

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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented in this university or any other for the award of a degree.

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DEDICATION

This work is dedicated to the loving memory of my late sister, Catherine Ogaja. Your unwavering belief in my potential and constant encouragement inspired me to pursue this journey. Though you are no longer here to witness this milestone, your legacy continues to light my path. May perpetual light always shine upon you.

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ABSTRACT

With the rise in reduced government funding, global competition and demand higher education, universities have adopted strategic approaches to stay relevant and enhance performance. This study analysed the relationship between Ansoff growth strategies, funding policy and the performance of chartered universities in Kenya and specifically examined the effect of Ansoff growth strategies comprising of market penetration, product development, market development and diversification on performance of chartered universities in Kenya and the moderating effect of funding policy on these strategies. Strategic Fit Theory (SFT), Resource-Based Theory (RBT) and the Contingency Theory provided an understanding of how strategic alignment and resource capabilities enhance university performance. A cross-sectional research design was used for data collection and analysis. Six chartered universities were randomly selected for a pilot study from a population of 60 and a census conducted from the remaining 54 comprising 22 private and 32 public Kenyan chartered universities. Primary data was collected, from vice-chancellors or senior management officers designated by the vice-chancellors using a structured questionnaire and SPSS V.26 was used to summarize descriptive statistics for frequencies, percentages, means and standard deviations. Inferential statistics and Pearson's correlation analysis were computed and hypotheses tested using simple and multiple regression analysis as well as PROCESS macro. The correlation analysis results established a significant correlation between market penetration, market development and funds generation policy and university performance ($p < 0.05$). Product development, diversification strategy and funds allocation policy, however, had an insignificant correlation with performance ($p > 0.05$). Hypotheses test results for market penetration strategy ($\beta = 0.356$, $p < 0.05$) and market development strategy ($\beta = 0.357$, $p < 0.05$) reveal a significant influence of the strategies on university performance, demonstrating their effectiveness in enhancing performance. In contrast, product development ($\beta = 0.054$, $p > 0.05$) and diversification strategies ($\beta = -0.244$, $p > 0.05$) did not show significant effects, implying that their contribution to performance is contextual. The study concludes that prioritization of market penetration and market development with supportive funds generation policies, significantly improves university performance. However, product development, diversification strategies and funds allocation policy distinctly were significant although the joint application of Ansoff growth strategies positively enhance performance of chartered universities. Universities should therefore strengthen revenue generation and apply a mix of Ansoff growth strategies for sustained performance.

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LIST OF ABBREVIATIONS AND ACRONYMNS

AGS	Ansoff Growth Strategies
BVI	Backward Vertical Integration
CUE	Commission of University Education
DUC	Differentiated Unit Cost
FVI	Forward Vertical Integration
HI	Horizontal Integration
MCAR	Missing Completely At Random
MD	Market Development
MP	Market Penetration
NACOSTI	National Commission for Science Technology and Innovation
OECD	Organisation for Economic Co-operation and Development
PD	Product Development
PPC	Pay-Per-Click
RBT	Resource Based Theory
SEO	Search Engine Optimization
SFT	Strategic Fit Theory
STEM	Science, Technology, Engineering and Mathematics
VI	Vertical Integration
VRIN	Valuable, Rare, Inimitable and Non-substitutable

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

University governance is evolving globally in response to competition, rising student and employer expectations and declining government funding (Jorge & Pena, 2017; Pucciarelli & Kaplan, 2016; World Bank 2021). While discharging their critical role in developing human resources, driving a country's economy through research and development (Odhiambo, 2018), universities are under pressure to pursue growth opportunities yet they must do so within the constraints of their internal capabilities and external environment (Odhiambo, 2020; World Bank, 2021). In this regard, strategic management a key for institutional survival, provides universities with an opportunity to identify strategic responses to adjust to external pressure, effectively allocate resources and remain competitive (Agyei & Mtembu, 2018).

In strategic management, performance is fundamental and provides a basis for measuring how effectively organizations achieve their desired outcomes (Al-Matari et al., 2014). Given that organizational goals differ across sectors, performance can be interpreted by both financial and non-financial multidimensional indicators. According to Zehir and Zehir (2023) financial measures can be conceptualized as return on equity, return on sales and return on investment, which point to economic sustainability. On the other hand, operational measures include customer satisfaction, innovation capacity, market share and product quality. Performance evaluation in higher education varies as a result of different institutional policies and mission (Chen et al., 2009). Khosroabadi et al. (2012) state that an integrated approach of both quantitative and qualitative non-financial measures capture the diverse nature of university performance. In this context, university performance should reflect multiple dimensions, including teaching quality, student outcomes, research productivity, and partnerships. Specifically, measures such as enrolment levels, graduation rates, faculty recruitment, scholarship opportunities, research publications, collaborations and stakeholder engagement serve as key indicators of a university's educational, financial and community performance (Ho & Peng, 2016; Nisar, 2015; Pruvot et al., 2015b; Rabovsky, 2014).

Organizations deliberately adopt growth strategies to enhance performance and competitiveness from the existing models of expansion. Through cost leadership, differentiation and focus, Porter (1980) offers firms generic strategies to achieve growth by positioning themselves within an industry. Equally, Kim and Mauborgne (2005) emphasizes innovation and the creation of uncontested market spaces propose through the Blue Ocean Strategy. Barney (1991) and Prahalad and Hamel (1990) argue a resource-based perspective, offers firms sustainable competitive advantage by leveraging internal resources and capabilities that are valuable, rare, inimitable and non-substitutable. Hitt et al., (2017), also state institutional growth can be achieved through internal innovation or integration with other entities through mergers, acquisitions and alliances.

From this growth perspectives, Ansoff (1987) provides a clear and practical product–market approach commonly used in the corporate sector. Ansoff's framework unlike models that primarily emphasize internal resources or industry positioning, ties growth to choices related to products and markets. The model provides four strategic options namely market penetration, product development, market development and diversification. Using market penetrations, firms broaden in existing markets through price adjustments, brand loyalty initiatives and promotions. Product development strategies involve the introduction of a firm's new or improved offerings into existing markets, necessitating research, acquisition of new competencies and innovation (Peterdy, 2022). Through market development strategy firms extend existing products into new geographic and promotions markets, through exports and outreach to untapped consumer groups (Hussain et al., 2013; Mbithi et al., 2015). Diversification the forth strategy considered most risky involves using new products to enter into new markets characterized by horizontal, concentric, vertical or conglomerate diversification (Chirani & Effatdoost, 2013; Le, 2019; Rothaermel, 2017). These strategies collectively, offer organizations deliberate growth pathways with diverse degrees of risk and resource needs.

Faced with challenges related to reduced government funding Kenyan universities are placing greater emphasis on how funding policies are designed and implemented to achieve strategic success (Kieu et al., 2020; OECD, 2017). Funding policies play a critical in directing how firms generate and allocate financial resources to align with priority areas ranging from research, program development and infrastructure. Well-structured funding policies provide the direction

for resource allocation for strategic initiatives and are flexible to allow for adjustments to respond to unanticipated challenges and opportunities (Halbheer et al., 2019).

Shifts in government fiscal policies have resulted to a decline in government funding against a rising student enrolment and cuts across both developing and developed nations (Cloete, 2016; Mgaiwa, 2018; Teferra, 2015). Funding for higher education has reduced due to competition for public resources (Pruvot et al., 2015) and the increased enrolment against reduced funding has put pressure on universities. Universities particularly in developing countries are struggling to address the resource concerns. Effective mechanisms for revenue allocation and revenue generation with clear policy guidelines are key (Mgaiwa, 2018; World Bank, 2010). However, while a US-based study (Shin, 2010) found no significant relationship between funding policy and institutional performance. A review of US-based studies by Dougherty and Reddy's (2013) suggest that funding policies enhance ultimate outcomes such as completion rates, though solid data to support this is lacking.

Universities play a crucial role in developing human resources and driving a country's economy by conducting research and development to enhance national development (Odhiambo, 2018). In line with the Kenya Vision 2030, which envisions a globally competitive quality education, training and research for sustainable development, universities in Kenya offer academic programs aligned with the country's Big Four agenda items that aim to address the country's development needs related to food security, manufacturing, affordable housing and healthcare. The academic programs offered by Kenyan universities are categorized into four levels: diploma, bachelor's, master's and doctoral. The nature of academic programs offered in different universities is influenced by various factors, such as the institution's nature of establishment, market forces, resource capacity, restrictions by professional bodies, space availability and adequacy, facilities and teaching staff (Mukhwana et al., 2016).

In Kenya, university activities are regulated by the Commission of University Education as per the Universities Act of 2012. The responsibilities of the commission include the accreditation of universities, recognition of qualifications and enforcement of quality assurance (McCowan, 2018). The number of universities has risen progressively since 1970 when the University of Nairobi was

established and stands at 35 chartered public universities and 25 chartered private universities CUE (2022).

Despite the remarkable growth, universities in Kenya are experiencing numerous challenges as they strive to discharge their mandate. These challenges include declining government funding and heightened competition for student enrolment (Sande & Waithaka, 2020). Central to addressing these challenges is implementation of appropriate strategies (Pucciarelli & Kaplan, 2016) and existence of necessary resources (Maritan & Lee, 2017; Sum & Chorlian, 2013).

1.2 Statement of the Problem

Universities in Kenya are faced with challenges as they address the rising student enrolment, reduced government funding and increasing competition. Student enrolment has increased in the past two decades as a result of population growth, increased graduation rates in secondary schools and efforts by the government to expand university education access (CUE, 2023). However, funding and supportive policies have not kept pace with this expansion. Public universities continue to experience declining government allocations per student and inconsistencies in student-based funding models, such as the Differentiated Unit Cost (DUC) model. Private universities on the other hand rely on unstable tuition fees, donations and partnerships (Kiptoo & Waiganjo, 2019; Republic of Kenya, 2022). Under the circumstances, both public and private chartered universities operate under financial constraints, experience challenges to uphold academic standards and prove relevant in a competitive environment.

To respond to these pressures, universities are adopting deliberate growth strategies to diversify revenue streams and enhance performance. Ansoff's growth strategic namely market penetration, market development, product development and diversification provide a structured way to grow, create competitive advantage and enhance performance (Ansoff, 1987; Hussain et al., 2020). Although Ansoff growth strategies have been widely examined in the corporate sector to drive growth and competitiveness, however, their application within higher education institutions, particularly in developing countries remains underexplored. Previous studies in Kenya and beyond have primarily examined the effect of individual Ansoff growth strategies on the performance of selected private universities, without examining their combined effect on the overall institutional performance of both public and private universities (Mutisya & Makokha, 2021). This highlights

a gap in comprehensive understanding of how both public and private chartered universities can effectively apply growth strategies to enhance their overall performance.

While, funding policy also play a strategic role in minimizing funding gaps, prioritizing and distributing funds in driving institutional priorities (Kieu et al., 2020; Swartz et al., 2018; Styger et al., 2016) previous studies have elicited mixed findings on the role funding policy on performance. A study conducted in the United States, found no significant relationship between funding policy and institutional performance (Shin, 2010). However, Dougherty and Reddy (2013) reported that funding policies improve performance outcomes particularly in relation to student completion rates, though empirical evidence remains limited. These inconsistencies suggest that performance outcomes may not be directly determined by funding policy. Instead, funding policies may shape or moderate the relationship between strategic initiatives and performance outcomes.

In spite of the central role of growth strategies and funding policies in shaping the performance of higher learning institutions, previous studies in Kenya have largely examined these factors in isolation. Few have explored the interactive effect between growth strategies and funding policy on university performance, resulting in a knowledge gap regarding the conditions under which growth strategies enhance performance in chartered universities. This study therefore aims to bridge this gap by examining the effect of Ansoff growth strategies on the performance of chartered universities in Kenya and assessing the moderating influence of funding policy on this relationship.

1.3 Objective of the Study

The main aim of this study was to examine the effect of Ansoff growth strategies on the performance of chartered universities in Kenya and the moderating role of funding policies in this relationship.

This study was guided by the following specific objectives:

i. To establish the effect of market penetration strategy on the performance of chartered universities in Kenya.
ii. To establish the effect of product development strategy on the performance of chartered universities in Kenya.

iii. To establish the effect of market development strategy on the performance of chartered universities in Kenya.

iv. To establish the effect of diversification strategy on the performance of chartered universities in Kenya.

v. To determine the joint effect of Ansoff growth strategies on the performance of chartered universities in Kenya.

vi. To determine the moderating effect of funding policy on the relationship between Ansoff growth strategies and performance of chartered universities in Kenya.

1.4 Research Hypotheses

The study tested the following hypotheses:-

i. $H_0$1: Market penetration strategy has no significant effect on performance of chartered universities in Kenya.

ii. $H_0$2: Product development strategy has no significant effect on performance of chartered universities in Kenya.

iii. $H_0$3: Market development strategy has no significant effect on performance of chartered universities in Kenya.

iv. $H_0$4: Diversification strategy has no significant effect on performance of chartered universities in Kenya.

v. $H_0$5: Ansoff growth strategies jointly have no significant effect on performance of chartered universities in Kenya.

vi. $H_0$6: Funding policy does not have a significant moderating effect on the relationship between Ansoff growth strategies and performance of chartered universities in Kenya.

1.5 Significance of the Study

This study will be valuable to scholars as its findings will enrich existing literature on Ansoff growth strategies and funding policy, while contributing to the advancement of the Resource-Based Theory, Strategic Fit Theory, and Contingency Theory. By examining the moderating role of funding policy on the relationship between Ansoff growth strategies and university performance, the study provides practical insights to help university leaders align strategic choices

with funding realities. Moreover, it offers policy relevance by informing reforms aimed at promoting sustainable growth, competitiveness, and improved performance in chartered universities.

1.6 Scope of the Study

The study focused on the moderating effect of funding on the relationship between AGS and University performance. The independent variable of the study was Ansoff Growth Strategies consisting of market penetration strategy, product development, market development and diversification strategy. The moderating variable of the study was funding policy which comprised funds generation policy and funds allocation policy, while the dependent variable was university performance. Out of the 60 chartered universities (CUE 2022) six were randomly selected for a pilot study and data for the main study was collected from the remaining 54 comprising of 32 public and 22 private chartered universities in Kenya with vice-chancellors or senior management officers designated by the vice chancellor being the respondents of the study. This study used a cross-sectional design to provide an overview of strategy and performance at specific academic years and the research conducted between October 2023 and June 2025.

1.7 Limitations of the Study

While steps were taken to ensure the quality and reliability of this research, there were a few limitations that were experienced. First, the study focused mainly on how internal strategic choices and institutional funding policies influence performance and did not consider examining external environmental factors such as shifts in government regulation, donor funding trends, or global higher education disruptions, including the effects of COVID-19, which may also shape institutional outcomes. These factors were not part of this study's scope but provide useful direction for future research.

Secondly, access to some senior university managers was a challenge owing to their demanding scheduled activities resulting in delays in responses and issues surrounding the nature of the data being collected which may have limited the responses received. To address this, several follow ups were made through email and phone calls by the researcher and the also emphasized on anonymous responses. Provision of formal authorization letter to participating universities and a research license from the National Commission for Science, Technology and Innovation was a

reassurance of confidentiality. Third, the study depended on self-reported data from vice-chancellors or designated senior management officers who may have been biased either by overstating achievements or understating in favour of their respective institutions. This potential bias was addressed through confidentiality assurances and comparison of the collected data with the available secondary data.

Fourth, the cross-sectional design also limited this study in establishing the causal relationship of the study variables over time. This limitation was addressed by employing robust statistical techniques, including PROCESS macro to examine the moderation effect of funding policy on the relationship between Ansoff growth strategies and university performance. Finally, the scope of the study was limited to 32 public and 22 private chartered universities in Kenya only without considering constituent colleges, or higher education systems operating under different regulatory and financial environments elsewhere. Notwithstanding these limitations, this study fill the literature gap by linking Ansoff growth strategies and funding policy the context university performance in Kenya, offering valuable insights to policy makers and university leaders in promoting data driven decision making.

1.8 Assumptions of the Study

It was assumed that the respondents, namely vice-chancellors or their designated senior administrators possessed adequate knowledge of their institutions' strategies and funding policies and would provide honest, accurate and unbiased responses to the questionnaire items. It was also assumed that the constructs were uniformly interpreted as defined in the questionnaire; and that the measurement tool was valid and reliable, having been refined through pilot testing and reliability checks. It was further assumed that the strategies and funding policies under investigation had been in place long enough to influence performance and that no major policy shifts occurred during the study period that could distort the findings.

1.9 Operational Definition of Terms

The following key terms were used in the study and defined as follows:

Ansoff Growth Strategies: A combination of four strategic approaches through which universities pursue growth and enhance performance by using existing and new products

to expand in existing and penetrate new markets through market penetration, product development, market development and diversification.

Chartered Universities: An institution of higher learning in Kenya that has met the quality standards set by the Commission for University Education (CUE) and has been formally granted a Charter by the President, thereby attaining full autonomy to operate as a university. As of 2022, there were 35 public and 25 private chartered universities in the country.

Diversification: A strategic approach where a university expands its scope of activities by introducing new products or services in new markets, thereby broadening its academic, research and income-generating portfolios beyond existing offerings.

Funding Allocation Policy: University internal guidelines that govern how financial resources are distributed in driving institutional priorities to enhance performance.

Funding Generation Policy: university guidelines that define the sources of revenue to support university functions and growth ranging from tuition, grants from government, funding from donors, local and international partnerships and investments.

Funding Policy: University guidelines that determine how financial resources are generated and also define sources of revenue to drive institutional priorities and minimize funding gaps.

Market Development: A growth strategy used by universities to penetrate new geographical markets and attract international students using existing academic programs.

Market Penetration: A strategy used by universities to expand in their existing markets through increased marketing, improved service quality and flexible fee structures.

Private University: A university institution of set up and managed by private individuals, religious organizations or corporate entities to drive the country's economy through teaching, research and development.

Product Development: A strategy employed by universities to grow and enhance performance through offering new academic programs, curriculum review and engaging in research activities.

Public University: A state owned university funded by the Government of Kenya through an Act of Parliament and mandated to drive the country's economy through teaching, research and development.

Strategy: A set of deliberate actions and decisions pursued by universities to grow, create competitive advantage and enhance performance.

University: An institution of higher learning either private or public offers undergraduate and postgraduate education, to drive the country's economy through teaching, research and development.

University College: A semi-autonomous institution affiliated to a chartered university and mandated to offer degree programs under the mentorship of the parent university until it attains full university status.

University Performance: non-financial measures for measuring university outcomes comprising of the number of students enrolled, number of students completing study period on time, number of publications, number of faculty recruited, number of scholarships awarded, number of local and international collaborations universities engages in.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines literature related to the study variables discussing the linkage between Ansoff growth strategies (AGS), funding policy and organizational performance and the theoretical perspective and also discusses conceptual framework for the study.

2.2 Ansoff Growth Strategies and Organizational Performance

Introduced by Ansoff (1957), Ansoff growth strategies, have been key in strategic management literature offering four strategic options for growth with varying levels of risks comprising market penetration, market development, product development and diversification commonly used by business enterprises to grow, create competitive advantage and enhance performance.

2.2.1 Market Penetration and Organizational Performance

According to Ansoff (1957) market penetration strategy the first and least risky of the four strategies in Ansoff growth matrix is used by firms to increase sales of existing products or services in existing markets by enhancing marketing efforts, employing competitive pricing, improving distribution channels and implementing branding loyalty initiatives. Gajanayake & Jayasundara (2021) state that through market penetration, firms build on their existing capabilities and customer knowledge to enhance performance while institutions in the context of higher education, enhance performance by increasing student enrollments through increased marketing and pricing for their existing academic products.

Empirical studies have revealed that effective market penetration contributes significantly to organizational performance across various sectors. A study by Kihoro and Kinyanjui (2022) established that Kenyan universities using thorough and focused student recruitment efforts and flexible learning modes experienced higher enrollment rates and improved financial sustainability. A study by Gichuki and Okibo (2021) also established that private universities enhanced competitive position and brand awareness by aligning marketing strategies with institutional goals. Alkasim et al. (2018) sought to establish the effect of impact of market penetration strategies on performance in the soft drink industry in the United States of America and found out that through

promotion and selling more products to existing markets as market penetration strategies, firms redefined their strategic position and gained competitive advantage.

In Kenya Wainaina and Oloko (2016) sought to examine the effect of market penetration strategies influence the performance of soft drink companies and their study established that while promotional activities had a positive relationship on firm performance, pricing and distribution strategies had a negative effect on performance, implying that caution should be applied when choosing which market penetration methods to use as not all market penetration initiatives promote organizational growth. Gacheo, Thuo and Byaruhanga (2016) conducted a study of mobile telecommunication firms in Kenya that sought to examine the effect of market penetration on the firm competitiveness. The study found out that then universities increases its markets share and builds stronger customer loyalty, it becomes more competitive though the success of market penetration strategies vary from one industry to the other implying that what works well in one industry may not necessarily have the same effect for other industries.

Tattersfield (2017) and Burke and Litwin (2012) state that universities increasingly implementing market penetration strategy as evident by findings from Boateng (2015) who conducted a study in Ghana to examine the effect of branding in public universities and found out that through branding and advertising, public universities were able to attract more students and staff and also enhanced their visibility. Kuria and Waiganjo (2016), conducted a case study of a public university In Kenya to examining the strategic responses to competitive advantage and found out that increased marketing efforts, improved service delivery and offering more academic programs contributed to universities attracting more students and improved their financial performance implying that market penetration helps universities become more competitive and better able to achieve their desired performance outcomes.

Shisia and Wanjere (2019) conducted a study to examine the effect of strategies on the performance of public universities in Nairobi County in Kenya and found that market penetration had a positive effect on university performance while Sande and Waithaka (2020) conducted a study to examine the effect of market penetration on the performance of public universities in Kenya established that increased promotion and advertising of university services enhanced

student enrollment demonstrating when universities effectively implement market penetration strategies, they attract more students and increase their visibility in the higher education sector.

Recently, digital transformation has become important as indicated by Obonyo and Were, (2023) who found that online learning platforms are key in attracting more new students while tools like chatbots and real time systems for academic support have improved student engagement. These tools now allow universities to better understand student preferences and design recruitment strategies that align with these insights. Kariuki et al. (2021) also conducted a study to examine the application of digital marketing in Kenyan universities established that social media, email campaigns and institutional websites play a central role in attracting prospective students. Wambua and Mberia (2023) also reported that universities depend on television advertising to reach specific audience segments.

With the growing importance of digital approaches, traditional marketing still remains significant and print media, television, radio and billboards are key factors on student enrollment decisions (Maina, 2019) using online platforms has provided universities with a broader reach for students at lower costs but traditional media such as radio, television and newspapers are still useful especially during admission periods when institutions target local audiences (Mammadova, 2021).

Stakeholder engagement is considered a critical factor in enhancing institutional performance. Kimutai and Kwambai (2018) examined the influence of stakeholder engagement on university performance and established a significant positive relationship between stakeholder involvement and overall university performance. The findings of the study established that active participation of stakeholders in decision-making processes influences effective strategy implementation in universities' and boosts productivity. A study by Nyabera and Lando (2022) examining use social media as platforms for stakeholder engagement in Kenyan universities and found that key channels for sharing information such as WhatsApp, Instagram, Twitter and YouTube, Facebook promote stakeholder interaction and nurture a sense of community within the academic environment. They observed that appropriate use of these channels improved stakeholder relationships and institutional reputation, although issues relating to the management of negative feedback and privacy are challenges that may hinder the effective use of these channels.

Theory and empirical evidence present mixed results on the relationship between market penetration and institutional performance. Salmi and Bassett (2021) study established that penetration strategy implementation enhances student enrollment and loyalty, the effectiveness of this strategy is dependent the competitive environment the institution is operating on. Salmi and Bassett (2021) argue that institutions need market penetration strategic reforms for optimum results. A study conducted by Mungai and Mbithi (2020) established that the successful implementation of market penetration strategies in Kenyan public universities is attributed to their reliance on government funding and bureaucratic rigidity and, undermine and recommend greater decentralization and the combination of private-sector marketing practices to overcome these barriers.

A study conducted by Ntombura et. al., (2020) to examine the link between market focus strategies and performance among private chartered universities in Nairobi and established a significant positive relationship of targeted recruitment and branding enhanced performance further emphasizing the importance of operating environment. Nderitu, et. al., (2020), conducted a multiple-case study of private universities and established that due to internal inefficiencies and limited marketing capacity, market-oriented strategies were inconsistently applied. These findings were consistent with Mungai and Mbithi (2020) who state that institutions administrative challenges are barrier to the growth potential of many universities.

In summary, strategic alignment of market penetration strategies in the higher education contributes to increased student enrollment, enhances a university's visibility and enhances overall performance implying that successful implementation of market penetration strategy depends on a universities' ability to respond to changes, howe well it uses its resources and adapts to new market trends, hence the use of both traditional and digital marketing methods provides stronger collaboration among stakeholders and improves university performance .

2.2.2 Product Development and Organizational Performance

Product development (PD) strategy helps universities stay up to date by creating new courses, improving existing ones in order to meet the changing needs of the students and employers, this includes designing new programs, using modern teaching methods, additional learning technology

to ensure training matches the job market demands (Orr et al., 2020), therefore, when PD strategies are well implemented universities stay relevant, competitive and improve their overall performance.

Research conducted from different industries shows that companies perform better when they create new products or improve their existing products in order to meet customer needs, adapt to market changes and stand out from competitors for instance Martin et al. (2020) in a study of Spain's technology sector established that using product development strategies driven by innovation had a moderate to a strong positive effect on organizational performance. A review conducted by Nguyen et al. (2021) of over two million business records from 171 studies across the world show that firms perform better when they use open innovation when they sharing ideas and improving their products through creativity and collaboration. This kind of product innovation helps businesses grow their market share, increase profits, stay relevant and achieve long-term success.

In the Kenyan context, Abikar and Muathe (2024) conducted a study to examine organizational capabilities as an antecedent of performance of property management companies and used a questionnaire-based survey and regression analysis and found out that enhancements in design, product quality and size had a significant effect of higher profitability, increased sales volumes and improved customer loyalty. Kiptoo and Koech (2019), also conducted a study to examine the effect of innovation on manufacturing firms in Kwale County and found that product innovation significantly influenced on organizational performance. These results emphasize the importance of innovation as a key factor in a firm's long-term growth and competitiveness.

In Asian, Liu et al. (2014) conducted a study to examine Taiwanese textile firms and used a quantitative research design and established that technical and marketing innovations are key components of product development strengthened firm's competitiveness and had a significant positive influence on firm performance. A firm's product quality and production efficiency were attributed to technical innovation, while marketing innovation is key in aligning products with consumer preferences. In Saudi, Arabia and Aloulou (2019) surveyed firms and observed that implementation of product development strategies enhances firm's overall performance as

innovative products attract more buyers and opens new market segments thereby contributing to acquisition of more customers and expanding the market.

A cross-national study conducted across Europe by Martínez and Fernández (2021) to examine the effect of product development strategy in higher learning institutions, established that introduction of varied academic programmes and digital learning in universities improved international rankings and student retention. They also observed that investment in market research, faculty development and, infrastructure enhanced institutional adaptability to the dynamic operating environment. In Asia, Zhang and Liu (2020) examined the development of STEM programmes in China and Malaysia and established that improved global competitiveness is directly linked to the alignment of programme innovation with industry needs. In summary, demonstrate that while enhanced university performance is attributed to a well-structured, data-driven product development, policies and institutional capacity determine the successful implementation of the product development initiatives.

Results from a cross-sectional survey conducted by Sande (2019) involving 33 public universities in Kenya established that student enrollment and stakeholder satisfaction was significantly influenced by market-oriented academic programmes. Kibuine et al. (2022) conducted a related study and examined product development initiatives implemented in private chartered universities using a descriptive and cross-sectional designs and established that implementation of structured models like the “stage-gate” and “scrum”, institutions improved quality assurance, conducted effective curriculum development and were able to better align their programmes with with market needs.

Using a mixed-method approach through a combination of correlation and content analysis, Ndichu (2014) conducted a study to examine strategic management practices and performance of chartered private universities in Kenya and concluded that product development strategy was commonly adopted and effective strategies in Kenya’s private universities emphasizing the need for stakeholder involvement and continuous assessment of the labour market in improving graduate employability and ensuring that the academic programmes remain relevant. Musyoka et al. (2021) and Obonyo and Were (2023) observe a rise in universities offering short courses,

executive education and interdisciplinary programmes such as those in data science and renewable energy, initiatives considered key in enhancing competitiveness in Kenyan universities.

Despite the benefits associated with product development challenges emanate from implementation of the strategy. Waswa and Katana (2022b) using qualitative interviews conducted a study to examine the effect of market saturation and the strategic risks of homogeneity in Kenya's higher education system and established that replication of academic programmes across institutions undermines innovation and resource efficiency resulting in low enrollments and marginal returns. In addition, Obonyo and Gakure (2015) further observed delays in realization of benefits from implementing product development strategy are attributed to slow accreditation processes, limited faculty capacity and infrastructural challenges.

In summary, literature across local and international settings, demonstrate that implementation of a well-planned product development strategies improves institutional performance, although successful implementation of product development strategy is determined by the institution's internal capabilities, conducting a market survey, existing institutional policy and institutional adaptability. International studies established that comprehensive innovation supported by strong funding mechanisms and supportive policy environments, whereas Kenyan studies highlight more adaptive and tactical responses shaped by Vision 2030 priorities, Commission for University Education (CUE) regulations and growing competition for student enrollment. In terms of research design, global studies often rely on longitudinal or comparative designs to examine strategic changes over time, while Kenyan research relies more on cross-sectional and mixed-method approaches that capture context-specific dynamics and practical insights.

The Commission for University Education (CUE, 2023) in line with national development goals has placed emphasis on the need for institutions to conduct curriculum review mirror the aspirations of Vision 2030 and the Competency-Based Curriculum. This supports the view that implementation of product development guided by market conditions with strong quality assurance mechanisms and depending on data to make decisions is bound to enhance performance of Kenya's chartered universities.

2.2.3 Market Development and Organizational Performance

Market development (MD), which involves the introduction of existing products or services into new markets (Ansoff, 1987), in higher education setting, is achieved through targeting new student markets the adoption of online learning platforms and expanding into new geographic markets., Universities broaden their reach through market development by extending existing academic programmes to new student groups including working professionals, international students and learners from untapped regions. Universities venture into untapped regions through establishment of satellite campuses, cross-border collaborations and introduction of online and blended learning modes. According to Altbach and de Wit (2018) observe, effective implementation of market development strategies is bound to take advantage of the rising international demand for flexible and inclusive learning opportunities. These market development strategy initiatives match the global trend of improving institutional visibility in international markets and expanding access to tertiary education.

Binsardi and Ekwulugo (2003) in their study of institutions in the United States, the United Kingdom and Australia state that, universities all around the world are implementing market development strategy. The study established that universities are able to access new markets and diversify their revenue sources by enrolling international students, establishing satellite campuses and introducing joint academic programmes. Birinci and Eren (2013) noted that through market development these countries are major players in the cross-border higher education having capitalizing on strong institutional branding, flexible delivery models and strategic collaborations. Lee and Wang (2020) also observed that competition has intensified for international students as a result of globalization, pushing universities to utilize more strategic marketing approaches to establish cross-border collaborations to expand their international reach.

Across Africa, Zeleza (2019) examined the continent's participation in the global higher education market and reported that, as of 2018, only about 4% of internationally mobile students were enrolled in African universities attributed this marginal percentage to the continuous systemic barriers which include inadequate infrastructure, underdeveloped digital platforms, weak institutional branding and minimal investment in international marketing. Alkasim et al. (2018) emphasizes the need of institutional funding to support efforts in advancing cross-border education

and further argue that universities need to invest in curriculum review to ensure there is alignment with market needs and international accreditation in order to compete effectively in international markets.

Previous studies have shown that market development strategy is central driver of sustainable growth within universities as established by Knight and Wolff (2020), who state that offering academic programs to international markets and engaging international collaborations does not only boost revenue but also improves institutional reputation and is an indication that inclusive market development efforts aimed entering untapped markets, places market development strategy.

The application of market development strategies in the Kenyan higher education sector has been investigated by several scholars with Riechi (2012) examining the effect of Module II (parallel) programmes in public universities and established that, the benefits of introduction of module II program initially boosted student enrolment and provided for generational of additional revenue, but later faced in maintaining institutional growth over time following a decline in the number of qualified KCSE graduates after 2016. Kimeu and Irungu (2023) also found out that universities' expansion into new counties significantly contributed to student enrolment, stronger stakeholder engagement and greater institutional visibility.

Muriuki and Wekesa (2022) identified digital transformation initiatives as the critical components in market development initiatives in higher education having conducted a study to examine the adoption of online and distance learning in Kenyan universities and found out that these modes of learning expanded access for working professionals, international students and learners in remote regions. While their study revealed that digital platforms not only improved enrolment and student satisfaction but also enhanced income diversification through short courses and professional certification programmes, Mutua and Mwanzia (2021) cautioned that the rapid expansion of online education in the absence of sufficient institutional support created challenges related to quality assurance, staffing and resource allocation, as such, the Commission for University Education (CUE, 2023) has stressed the importance of sell defined strategic plans and financial mechanisms as well as upholding quality standards in both physical and virtual modes of delivery.

McKinney et al. (2016) and Radu (2016) also consider digital marketing as a key element of market development strategies within higher education indicating that social media platforms such as Facebook, Instagram and Twitter enable universities to attract and engage prospective students, strengthen their brand equity and enhance institutional visibility findings which also align with Brech et al. (2017) who also established a positive association between the number of Facebook followers and student enrolment growth with Rutter et al. (2016) further identifying the effectiveness of pay-per-click (PPC) advertising, search engine optimization (SEO) and mobile-optimized websites in broadening institutional reach. Jin and Cedrola (2018) noted that these tools allow universities to set themselves apart in the expanding global higher education sector and Tattersfield (2017) also highlighting the value of digital marketing in delivering targeted communication, as demonstrated by MacEachern and Yun (2017) that international students rely extensively on university websites and social media platforms when making enrolment decisions. Muga (2016) found that international pharmaceutical companies in Kenya grew considerably by setting up local distribution channels and adapting their operations to fit the local market this approach resulted in making their products more acceptable to customers and built stronger loyalty to their brands.

Mwangi and Wanjiru (2021) studied private universities and found that expanding to new regions and attracting different groups of students helped improve enrolment and raise the universities' profiles, however, they noted that for these gains to last, universities need to offer unique programmes and maintain high quality standards. Kimani et al. (2022) on the other hand found that how well institutions follow regulations, manage their funding and compete in the market greatly affects the success of their market expansion efforts while Oduor and Njuguna (2023) observed that universities attracting international students, offering online learning and engaging with local communities resulted in significant growth in student numbers, better financial stability and stronger reputations.

Market development has also proven effective in other industries as stated by Mbithi et al. (2015), in their study of sugar manufacturing companies, found that firms that expanded into new regional markets recorded higher sales and noticeable improvements in their overall performance and Muga (2016) also found that international pharmaceutical companies in Kenya grew significantly by

creating local distribution networks and adjusting their business strategies to suit the local market, this helped their products gain wider acceptance and built stronger customer loyalty to their brands.

Previous studies show that expanding into new markets is a key factor for growth in both universities and other industries and when done strategically with proper planning, enough resources and adherence to regulations, market development helps increase student enrolment, strengthen financial stability and raise institutional visibility, however, its success largely depends on an organization's ability to respond to market needs, manage resources well and stay aligned with existing policies.

2.2.4 Diversification and Organizational Performance

Diversification is a growth strategy that enables an organization expand its activities by introducing new products or moving into new markets whether connected to its current operations or not with an aim of boosting growth, avoid relying too much on one market and ensuring long-term financial stability (Ansoff, 1987; Hitt et al., 2017; Johnson et al., 2017). However, even though diversification strategy is a key part of Ansoff's growth matrix, diversification is often seen as the riskiest strategy since it involves entering new areas where customer preferences and market conditions are uncertain and the competitive forces unpredictable (Johnson et al., 2017). In the higher education environment, diversification may evident through the introduction of new academic programs, the establishment of commercial ventures, or the development of supporting services such as real estate projects and consultancy units. Although this strategy can open up new sources of income and make an institution more flexible, it also comes with major risks if it is not well planned or if the organization lacks enough resources to support it (Teece et al., 2016). (Teece et al., 2016).

Many studies have looked into how expanding into related areas especially through strategies like horizontal integration and concentric diversification can help organizations grow with Santarelli and Tran (2013) establishing that when companies merge with or acquire others in similar lines of business otherwise horizontal integration, they perform better by working more efficiently together, gaining a larger market share and reducing costs, their research also showed that entering new markets this way helps companies stay financially stable by creating more income sources, using resources more effectively and avoiding overreliance on old or crowded markets. In the case

of universities, Fitri et al. (2019) found that strategies like setting up new campuses, offering academic programmes in areas that previously had few options and partnering with other institutions can boost financial performance, attract more students, widen the university's reach and make it more competitive as a whole. In higher education, Mutua et al. (2022) found that when universities expand their academic programmes, provide professional training services and create courses that combine different fields of study, they achieve better financial stability and improved student success and the positive results were even greater when universities based their diversification efforts on their existing strengths particularly in science and technology areas.

Another key form of diversification is vertical integration, which involves expanding operations either backward by way of controlling the supply of inputs or forward through managing the distribution or delivery of products and services as stated by Martinez and Wolverton (2009) noted that backward integration seen both in business and education helps institutions gain more control over their student intake by working closely with secondary schools and offering certificate-level programmes that prepare learners to join higher education. On the other hand, forward integration through collaborations with industries, turning research into marketable products and creating job opportunities for graduates helps universities expand their impact, improve students' chances of getting jobs and promote innovation within their communities.

Although expanding into related areas usually produces good results, research also shows that venturing into completely unrelated fields can have negative effects as Zhao et al. (2016) found that universities that moved into areas that did not match their core academic goals often lost strategic direction, wasted resources and saw their overall performance decline and Muchele and Kombo (2019) also observed that when institutions ventured into unrelated sectors like retail, hospitality, or consultancy, they struggled to maintain academic quality and focus sometimes ending up hurting their reputation and weakening their main mission.

In many developing countries, universities have diversified mainly because of financial challenges as studies by Ekpoh and Okpa (2017) and Ng'ang'a (2014) noted that institutions with limited funding often start commercial activities like building and renting property, running hotels, or offering consultancy services to generate extra income and support their operations. Although these efforts helped ease financial pressure in the short term, both studies pointed out that

universities continued to face ongoing challenges, including limited managerial expertise, weak governance structures and misalignment with core academic objectives, however, when diversification was guided by thorough market research and involved active participation from key stakeholders, it led to more sustainable and well-focused long-term benefits

Partnerships with industry have become a key way for universities to achieve forward vertical integration as Zhang and Wang (2017) found that when universities work closely with industries, they greatly improve students' job readiness through internships, job placements and practical training and their study also showed that these collaborations help universities turn research ideas into real products that can be sold, creating new income sources and making the institutions more competitive. Kruss et al. (2015) found that universities with formal structures like technology transfer offices, incubation centres and innovation hubs were better at aligning their research with real market needs and Kimani and Waweru (2021) noted that these units act as vital connections between universities and industries, helping turn research results into income-generating projects that strengthen the universities' financial stability.

Even though diversification has many benefits, several challenges still limit its success as Oduor and Njeri (2023) found that many diversification efforts fail because of lack of funds, poor management skills and limited understanding of the market and Goddard et al. (2019) also emphasized that diversification must align with a university's main mission and strengths warning that without proper planning, these efforts can strain resources and lower academic standards. Marginson (2020b) agreed with this perspective, explaining that universities that invest too much in activities outside their main academic roles often face management problems and lose their strategic direction arguments that align with the Resource-Based View (Barney, 1991), which states that long-term success comes from using an institution's unique resources effectively. Mutua et al. (2022) also found that poor planning and lack of coordination often reduce the benefits of diversification, while Muchele and Kombo (2019) pointed out that the lack of government incentives and supportive policies makes it difficult for universities to grow their partnerships with industry.

In summary, studies show that when diversification is well planned, aligned with an institution's goals and supported by enough resources, it can greatly improve financial stability and long-term

sustainability, boost research productivity and broaden opportunities for students. On the other hand, diversification efforts also carry risks such as losing focus on the institution's main mission, management inefficiencies and limited resources need to be identified early and properly managed to achieve lasting success, research suggests that diversification works best when it builds on an institution's strengths, is supported by strong leadership and operates within a favorable policy and market environment. Table 2.1 provides a summary comparing the different results reported in various regions, showing how diversification appears in different higher education contexts.

Table 2.1 Regional Analysis of Positive and Negative Outcomes of Diversification Strategies in Higher Education Institutions

Region	Positive Findings	Negative Findings
Developing Countries including Nigeria and Kenya	Diversifying into non-academic activities helps universities create other sources of income to support their main academic operations (Ng'ang'a, 2014; Ekpoh & Okpa, 2017). Expansion of partnerships boosts research and job placements (Kimani & Waweru, 2021).	Success of diversification efforts is limited by shortage of proper facilities and qualified academic staff (Muchele & Kombo, 2019). Strict or unclear regulations can slow down university growth (Zeleza, 2019).
Asia in Indonesia	Building more partnerships strengthens research opportunities and increases job placements for graduates (Fitri et al., 2019). Using both backward and forward strategies allows an institution to manage the entire value chain (Santarelli & Tran, 2013).	Insufficient resources leads to implementation delays (Mutua et al., 2022). risk of internal conflict (Zhao et al., 2016).

Region	Positive Findings	Negative Findings
Western Countries in the United States of America and Europe	Innovation and commercialization succeed when universities work closely with industries (Martinez & Wolverton, 2009).	Poor results occur when a university's strategies do not match the main mission (Zhang & Wang, 2017).

Table 2.1 summarizes both the positive and negative results from studies on university diversification strategies, showing clear differences across regions with findings indicating that successful diversification in higher education mainly depends on proper planning, strong institutional capacity and the ability to adapt to external conditions, views supports the Resource-Based Theory, which points out that universities gain a competitive edge by effectively using their internal resources and strengths. From this perspective, universities that make good use of their key strengths such as skilled faculty, quality academic programmes and strong research capacity are more likely to benefit from diversification, like forming partnerships with schools or industries to support research commercialization (Martinez & Wolverton, 2009), states that institutions can get the most out of their resources, therefore, universities that design diversification strategies around what they already do well such as introduction of new but related academic programmes tend to achieve better and more lasting results.

The smart use of a university's own strengths became even more important during the COVID-19 pandemic, which disrupted education worldwide and forced universities to change quickly and by moving to online learning and using digital tools, universities were able to reach more people, including international students and working adults, expanding access to education beyond traditional classrooms. The growing use of the digital platforms led to the expansion of online degree programmes, short courses and executive training, which helped universities earn income from new sources (Liyanagunawardena et al., 2020) and the rise of digital and micro-credentials also created new ways to match academic programmes with changing job market demands, making universities more relevant and financially stable in the long run (Zhao et al., 2020).

The COVID-19 pandemic forced universities to adapt quickly to global changes and uncertainty, which included changing student needs, financial pressures and new job market trends as Hodges

et al. (2020) note that after the pandemic, there has been growing demand for flexible and broad learning environments, in response, many universities now use blended learning combining online and in-person classes to serve both traditional students and those who prefer distance learning. The pandemic also pushed universities to branch out into new areas like corporate training and workforce development programmes, leading to stronger partnerships with industries (Fitzgerald & Kenny, 2021) with these collaborations helping to fill skill gaps in the job market while creating new business opportunities for universities and supporting local and regional economic growth.

Previous studies show that when universities align their diversification strategies with their main strengths and operating environment, they can boost performance, strengthen financial stability and build long-term resilience with researchers generally pointing out two main types of diversification that affect results: related diversification, which builds on existing areas of expertise and unrelated diversification, which moves into completely new fields. Related diversification includes expanding academic programmes within the same or closely connected fields otherwise referred to as horizontal integration and creating certificate or diploma courses that support student progression and job readiness through vertical integration. This approach benefits both businesses and universities because it builds on what universities already do well using existing expertise, facilities and experience to achieve steady growth and stay competitive.

On the other hand, when universities start new businesses that have little to do with teaching or research like running hotels, shops, or consultancy services, they must be very cautious since these ventures are risky, expensive and can take attention and money away from their main purpose of education, but, for universities struggling financially, trying out such ideas, though difficult and costly, can be an important way to stay afloat and secure their future.

2.2.5 Joint Ansoff Growth Strategies and University Performance

Universities around the world are facing growing pressure to stay competitive, financially stable and meet the changing needs of students and other stakeholders (Altbach et al., 2009; Salmi & Bassett, 2021) and to deal with these challenges, many have turned to Ansoff's growth strategies market penetration, product development, market development and diversification either by using one or a mix of these approaches to improve their performance and sustainability (Ansoff, 1957; Hussain et al., 2020). Studies show that although each of Ansoff's growth strategies has its own

benefits, using them together often leads to better results for institutions, hence, when universities or organizations combine market penetration, product development, market development and diversification, they tend to perform better, adapt more easily to change and remain sustainable in the long run as evidenced by Mutisya and Makokha (2021) and Mungai and Mbithi (2020) who found that organizations using these strategies jointly experience stronger growth than those relying on just one at a time.

According to Ansoff (1987), applying market penetration, product development, market development and diversification in a strategic way helps organizations link their growth plans to what they do best internally and the opportunities available outside, although these strategies were first meant for businesses, they have become very useful for universities too and today, higher education institutions use them to attract more students, expand academic programs, reach new markets and create new sources of income. Even though these strategies are highly relevant, Aloulou (2019) pointed out that there are still very few studies that have looked at how implementation of all of Ansoff's growth strategies together affects performance and the studies that do exist show that whether applied individually or jointly, these strategies can greatly improve outcomes such as financial performance, market share and overall competitiveness.

In Kenya, Wanjiru and Gonjera (2015) studied small and medium-sized businesses in Thika and discovered that companies using all of Ansoff's growth strategies saw clear improvements in their sales, profits and number of customers and their research showed that these strategies can work well even in environments with limited resources, proving that they are useful tools for helping businesses survive and succeed in developing economies. Kahonga and Kariuki (2020) also studied insurance companies in Nairobi and found that market penetration, product development, diversification and mergers together accounted for 59% of the differences in how well the firms performed and among these strategies, market penetration had the strongest link to performance, showing that increasing market share in existing markets plays a key role in promoting growth and competitiveness and the study concluded that focusing on current markets remains one of the most reliable ways for organizations to achieve sustainable growth, even when other strategies are available.

In the case of universities, Mwangi and Otieno (2022) found that using Ansoff's growth strategies in a coordinated way led to major improvements in student enrollment, financial stability and overall institutional reputation with their study revealing that universities combining several strategies such as introducing new academic programs as product development strategy, expanding into new regional or international markets through market development and increasing recruitment efforts through market penetration, universities experienced greater growth than those that implemented only one strategy at a time. Njoroge et al. (2023) also examined higher education institutions in Kenya and confirmed that using all of Ansoff's growth strategies together led to greater improvements in performance with the study showing that universities which diversified their academic programs and entered new markets not only attracted more students but also improved their financial stability and ability to adapt to changing conditions.

However, researchers have also recommended caution as advised by Oduor and Achieng (2023) who found that when universities tried to grow too quickly by opening many new campuses, introducing international programs, or introducing courses without proper preparation they often faced problems such as inefficiency, poor service delivery and damage to their reputation and Mintzberg et al. (2005), supports the view and warns that when an institution's goals are not well matched with its available resources, it can loose focus on its main mission and experience a decline in overall performance.

2.3 Funding Policies and Ansoff Growth Strategy-Performance Relationship

Funding policies are central to organizational performance, particularly in the education sector. In the context of universities, financial stability affects the ability to execute growth strategies such as those proposed by Ansoff while also determining the quality and scope of teaching, research and student outcomes. Ansoff growth strategies which include market penetration, product development, market development and diversification require varying degrees of financial investment, making funding policy a critical enabler or constraint to strategic action (Morphew & Eckel, 2009).

All over the world, universities have gone through major changes in how they are funded as Figel (2008) and Mukhwana et al. (2016) observed that many institutions now receive funding based on their results such as the number of graduates, quality of research and student satisfaction levels,

their studies showed that as government funding continues to decrease, universities are being pushed to focus more on measurable performance and results to secure financial support. In the United States, government funding for higher education in 2018 was more than $7 billion lower than it had been in 2008 and this decline forced many universities to raise tuition fees and reduce staff as established by Marginson (2017a) who found that in the United Kingdom, public funding for universities fell sharply from 34.8% to 19.1% between 2008 and 2013 pushing institutions to seek other income sources through partnerships with industries and by engaging in commercial ventures to stay financially sustainable.

In Africa, Cloete (2016) and Swartz et al. (2018) analyzed the South African context and reported that government support for universities declined from 49% to 30% between 2000 and 2013. This funding gap pushed institutions to privatize services and diversify income sources. Mukhwana et al. (2016) also found that Tanzania's University of Dar es Salaam saw state contributions fall from 82.6% to 37% in under a decade, while Mgaiwa (2018) and Jalal and Murray (2019) reported that Kenyan universities faced a Kshs.10 billion budget cut between 2018 and 2021, raising concerns over their long-term financial sustainability.

To cope with reduced funding, researchers have noted that universities are finding new ways to generate income where Maringe and Mourad (2012) and Altbach et al. (2009) observed that many universities are now using business-like approaches to raise money such as starting income generating projects, partnering with industries, seeking donations from alumni, offering consultancy services and selling or applying their research for profit. According to Salmi (2009), these strategies help universities fill budget gaps, improve their facilities, introduce new programs and maintain strong research performance. Langa (2010) and Etzkowitz (2003) added that working with industries not only brings in money but also helps students gain practical experience through internships and real-life projects. UNESCO (2015) and Munene (2016) also found that contributions from alumni play an important role in supporting universities with the funds helping to provide student scholarships, finance research activities and improve campus infrastructure, making alumni support a key part of sustaining university development.

Consultancy work is also an important way for universities to raise money as Shattock (2005) and Johnstone (2003) found that when lecturers and researchers offer expert advice or services to

governments, NGOs and private companies, universities earn significant income while OECD (2012a) and Tijssen (2006) also noted that turning research into business opportunities such as through patents, licenses, or new start-up companies helps universities make money and strengthen their reputation for innovation. Pruvot et al. (2015b) also noted that when universities engage in income-generating activities, they become more financially independent helping them continue running smoothly and maintain quality services, even when government funding is reduced.

Studies have shown that how universities share and use their matters a lot as Singha et al. (2023) argued that careful longterm planning and efficient spending enables universities conduct better research, maintain high education standards and remain financially stable and Chen et al. (2024) conducted a study at thirteen top universities in China and found that the better they managed and used their funds, the higher their research output and education quality were. Their findings show that investing funds wisely in areas such as developing new programs, hiring skilled staff, upgrading facilities and supporting research is essential for helping universities stay relevant, produce employable graduates and build a strong reputation, but Johnstone (2003) and Salmi (2009) cautions that without proper planning and effective use of resources, universities risk becoming inefficient, lowering the quality of their services and losing their competitive advantage.

Researchers have also examined budgeting based on performance and the OECD (2012b) found that universities using systems that link funding to results or needs tend to perform better they achieve their goals more effectively, attract more students and produce stronger research and clear and fair budgeting systems also promote accountability and flexibility, while old or politically influenced methods often cause waste and slow progress.

Researchers have increasingly pointed out a connection between funding policies and Ansoff's growth strategies as established by Omondi and Wanjere (2019) who found that universities with strong financial backing are able to take bigger risks such as developing new academic programs or expanding into new markets as opposed to institutions with limited funding who tend to choose safer strategies, like growing their presence within existing markets. Garwe and Maganga (2015) found that when government funding was reduced in Zimbabwe, graduation rates dropped from 86% in 2009 to 75% in 2011 after the cadetship program was stopped while in Kenya, Shisia and Wanjere (2019) established that low government funding made it difficult for universities to grow,

showing that financial stability directly affects how well institutions can implement their growth plans.

Funding policies also have a strong impact on staffing and overall human resource management as evidenced by Munyoro et al. (2016) and Pruvot et al. (2015) who found that the number and quality of staff directly influence teaching standards, research output and student success and their studies showed that when budgets are cut, universities often freeze hiring, lay off staff and reduce opportunities for professional development leading to larger class sizes, weaker mentorship and lower research productivity. In Kenya, Tuikong (2020) found that higher tuition fees and fewer course options caused declines in student retention and graduation rates, demonstrating how financial limitations can harm both student outcomes and institutional performance.

Well-structured and flexible funding policies can help universities handle financial challenges more effectively as Miller and Green (2020) and Ngugi et al. (2022) noted that institutions with funding policies that are not rigid are able to implement different growth strategies successfully, even when the economy is struggling while Jones and Miller (2022) emphasizes that such flexibility helps universities to stay innovative and even with limited resources as opposed to countries like South Africa and Ghana where performance-based funding supports research and graduation outcomes, while Ghana's opaque funding model produced inconsistent results.

Literature shows that in general funding policies greatly shape how universities plan and perform and universities with supportive funding policies can pursue growth strategies like expanding into new areas or creating new programs, while those with limited funds usually stick to safer, low cost options like improving existing markets and cutting expenses. However, limited research exists on the direct link of funding policies and how universities apply Ansoff's growth strategies comprising of market penetration, product development, market development and diversification particularly in African chartered universities bringing out the need for further studies detailing how funding policies influence university growth in settings with limited resources.

Overall, the reviewed literature shows that funding policy significantly influences the strategic choices and performance of universities. Institutions with stable financial resources can adopt ambitious growth strategies such as diversification and international expansion, while those with constrained resources resort to conservative approaches such as market penetration and cost-saving

measures. However, there is a notable gap in empirical research explicitly linking funding models with the implementation of Ansoff's strategic typologies; market penetration, product development, market development and diversification particularly within African chartered universities. This gap highlights the need for more nuanced, context-specific research to understand how funding policies shape the growth trajectories of universities in resource-constrained environments.

2.4 Theoretical Perspective

This study was guided by Strategic Fit Theory (SFT), Resource Based Theory (RBT) and Contingency Theory.

2.4.1 Strategic Fit Theory

The Strategic Fit Theory by Hofer and Schendel (1978) explains that organizations best perform when there is a match between organization's internal resources and capabilities and the external environment to achieve competitive advantage and ultimately enhance performance. The Strategic Fit Theory (SFT) suggests that an organization performs best when its internal strengths and abilities are in harmony with external factors such as market conditions and environmental demands (Venkatraman & Camillus, 1984), therefore, when an organization aligns its strategies with these external realities and its own goals, it is more likely to gain a lasting competitive advantage and achieve strong performance and this alignment is especially important in the higher education sector because universities are dealing with changing funding patterns, growing competition and changing expectations from students, governments and other stakeholders.

For chartered universities in Kenya, the Strategic Fit Theory offers useful understanding into how growth strategies such as market penetration, market development, product development and diversification should match both the universities' internal resources and the external environment in which they operate as this alignment helps universities make strategic decisions that are practical, long-lasting and adaptable to changes in the education sector and the wider economy, hence, the highlights that there is no single growth strategy that can be generally applicable in all sectors, its success depends on how well it aligns with each university's unique circumstances including its mission, sources of funding, academic strengths and the specific markets it serves (Venkatraman & Camillus, 1984)..

The application of SFT in this study supports the analysis of whether the selected Ansoff growth strategies are appropriately tailored to the contextual realities facing Kenyan universities, including reduced government funding, increased competition and the pressure to enhance institutional performance. In addition, SFT helps explain the variability in performance outcomes among universities pursuing similar strategic approaches, attributing differences to the degree of alignment or misalignment between strategy, resources and environment (Miles & Snow, 1978).

Therefore, SFT supports the theoretical foundation of this study by explaining that aligning strategies with both internal and external factors is key to university performance and it complements the Resource-Based Theory by focusing on how a university positions itself within its broader market and policy environment.

2.4.2 Resource Based Theory

The Resource-Based Theory (RBT), developed by Barney (1991), that an organization's success depends largely on the unique resources and abilities it possesses stating that when an organization has resources that are valuable, rare, difficult to imitate and cannot be replaced (VRIN), it can use them to create and sustain a competitive advantage improving efficiency, effectiveness and overall performance (Barney, 1991; Wernerfelt, 1984), thus the RBT gives universities a useful guide for understanding how they can use their unique strengths such as research facilities, strong reputations, skilled academic staff and advanced technology to reach their strategic goals and stay competitive.

Recent research has shown that the Resource-Based Theory (RBT) is highly appropriate in studying how universities perform and position themselves strategically as Sirmon et al. (2020) noted that institutions can create long term value by using their staff, skills and systems in ways that competitors cannot easily copy and Ndofirepi and Rambe (2022) used RBT to examine how universities engage in commercial activities and use institutional resources drive innovation and performance in African universities, showing the importance of using internal strengths to enhance performance.

This study, uses the Resource-Based Theory to help understand how chartered universities in Kenya use their internal strengths to effectively apply Ansoff's growth strategies explaining that

universities with strong leadership, skilled staff, reliable ICT systems and varied funding sources are better placed to expand into new markets or develop innovative programs supporting the view that funding policies for generation and allocation of financial resources influence the extent to which universities can tie their internal capabilities to drive growth and remain competitive.

Grounded on RBT, this study advances the understanding of how internal resource endowments interact with strategic growth choices to influence performance. When considered alongside SFT, RBT offers a comprehensive view of both internal capability exploitation and external strategic alignment, thereby providing a robust analytical framework for investigating performance outcomes in the Kenyan higher education sector.

2.4.3 Contingency Theory

Contingency Theory emerged in the 1960s through Fiedler (1964), Burns and Stalker (1961) and Lawrence and Lorsch (1967), who argued that there is no single best way to structure or manage an organization, but rather, organizational effectiveness depends on the degree of alignment or fit between internal structures, strategies and external environmental conditions. The theory assumes that the optimal course of action is determined by the organization's internal and external situation (Donaldson, 2001).

Contingency Theory in the higher education suggests that the performance of universities depends on how well their strategies, governance systems and resources align with environmental contingencies such as government policies, funding mechanisms, market dynamics, technological change and stakeholder expectations. Universities operate in complex and evolving environments characterized by fluctuating student demand, regulatory reforms and increasing competition from both local and international institutions, therefore, strategic choices such as market penetration**,** product development**,** market development and diversification must be adapted to institutional settings rather than applied uniformly across all universities.

Universities with limited funding often focus on market penetration by making the most of their existing programs, improving student outreach and increasing retention rates while on the other hand, institutions with stronger financial support are more likely to invest in new programs, expand into new markets and build international or industry partnerships implying that funding policy

plays a crucial moderating role it determines how well a university can plan, implement and maintain its strategic growth initiatives. When universities have steady and reliable funding, they can plan to effectively operationalize growth strategies that enhance performance, whereas restrictive or inconsistent funding frameworks may constrain implementation and diminish strategic outcomes.

Contingency Theory works together with the Strategic Fit Theory and the Resource-Based View (RBV) by showing that the success of a strategy depends on the specific situation an organization is in. The RBV focuses on using a university's internal strengths and resources to stay competitive, while the Strategic Fit Theory stresses matching internal strategies with outside market conditions and the Contingency Theory brings these ideas together, explaining that good performance comes from how strategy, structure, resources and the surrounding environment all work together which helps explain how Ansoff's growth strategies and funding policies jointly affect how well chartered universities in Kenya perform.

2.5 Conceptual Framework

The study's conceptual framework shows how Ansoff growth strategies, funding policy and university performance are connected with the Ansoff Growth Strategies as the predictor variable, funding policy acts as the moderating variable and university performance is the outcome variable. The main measures for each of these variables were taken directly from the questions used in the study's questionnaire. Ansoff growth strategies were operationalized through four dimensions: market penetration, product development, market development and diversification.

Market penetration was examined by looking at how student enrollment increased, how well universities promoted themselves and how visible their programs were while product development was measured by the creation of new academic programs or major improvements to existing ones with market development assessed by checking whether universities opened new campuses, reached new regions, or attracted student groups they had not served before. Diversification was examined through efforts to introduce non-traditional courses, start income-generating projects, or form partnerships beyond their main academic activities.

Funding policy, which acted as the influencing factor in the study, was explained through two main areas: how money is raised and how it is spent with the funds generation policy looking at how universities get their money through resource mobilization, having different income sources and building partnerships. The funds allocation policy, on the other hand, focused on how universities decide where to spend their money and how efficiently they distribute their resources and the university performance, the dependent variable, was measured by indicators reflecting educational, research and community outcomes. These included student enrolment and graduation rates, faculty recruitment, scholarships, research output, publications, collaborations and stakeholder engagement.

The framework suggests that strategic initiatives will drive university performance as follows: institutions adopting deliberate growth strategies are expected to enhance their competitiveness, sustainability and performance. However, the extent of this relationship depends on the moderating influence of funding policy, which determines how effectively resources are mobilized and allocated to support strategic implementation.

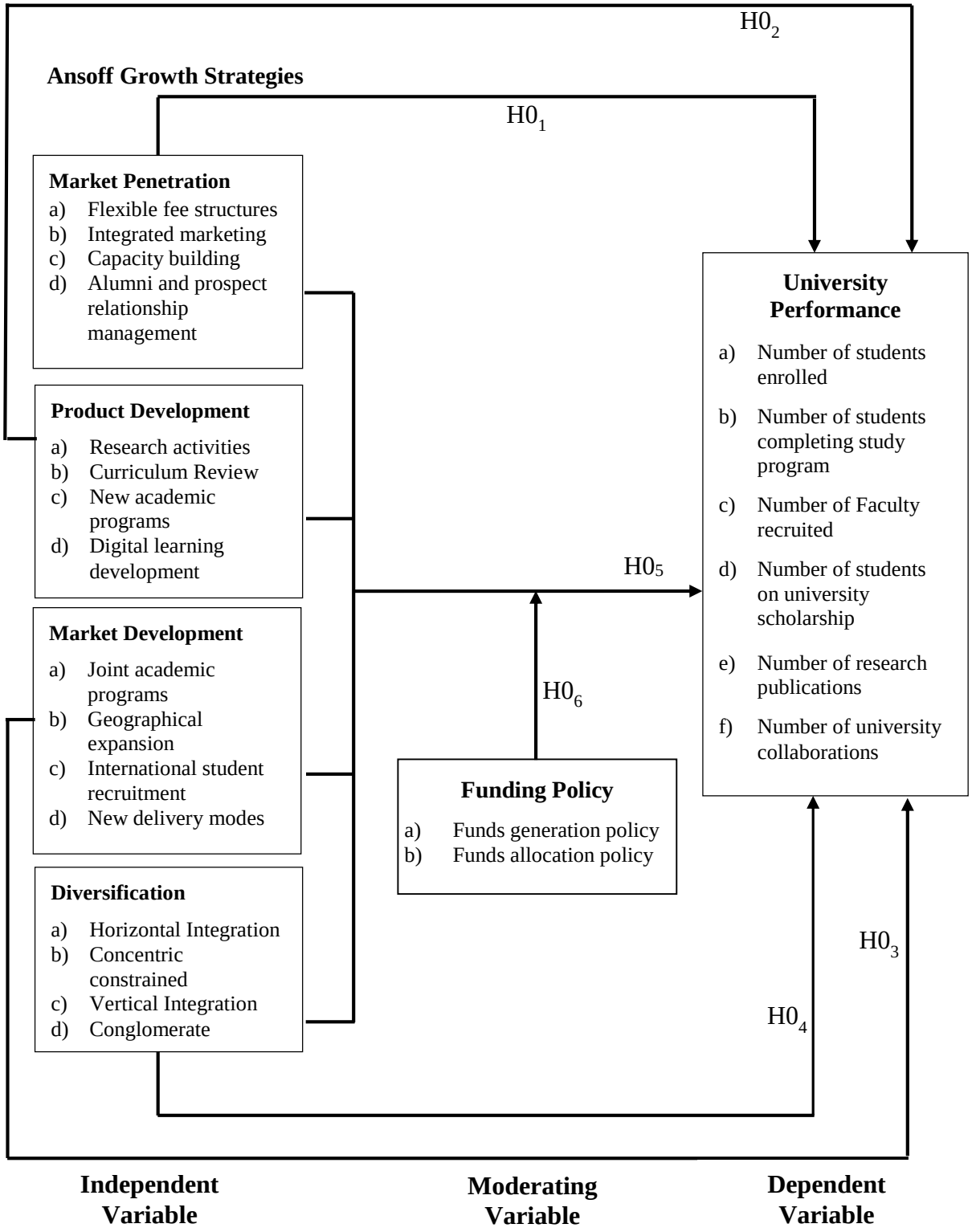

Figure 2.1: Conceptual Model of the Relationship between AGS, Funding Policy and University Performance

The nature of the relationships within this framework proposes a direct link between both the distinct and the joint application of Ansoff growth strategies and university performance. The study anticipated that Ansoff growth strategies will drive performance outcomes in chartered universities. Through flexible fee structures, integrated marketing, capacity building and alumni and prospect relationship management market penetration is expected to enhance performance. By undertaking research activities, review curriculum, introducing new academic programs and implementing digital learning, product development should foster innovation, enhance research productivity and respond to evolving educational needs. Universities that have joint programs, expand geographically, recruit international students and offer new delivery modes they implement market development strategy and broaden institutional reach and attract previously untapped learners. By implementing diversification strategy through horizontal and vertical integration, concentric constrained diversification and entry into unrelated ventures, universities are expected to open up new revenue streams and expand the students demographic base (Hitt et al., 2017).

The model further conceptualizes that funding policy the moderating variable influences the extent to which growth strategies explain performance outcomes. Supportive funding policies are expected to minimize funding gaps, guide the sources of funds, prioritize distribution of funds in driving institutional priorities and subsequently enhance performance. are anticipated to strengthen the positive effects of growth strategies. On the other hand, misaligned funding policies may hinder strategic implementation and diminish performance gains emphasizing the importance of the combined internal strategic orientation and the financial resources in shaping university performance (Salmi & Bassett, 2021). Funding policies, which provide guidelines for how financial resources are mobilized and distributed, play a critical role in determining whether AGS can be successfully implemented and sustained.

With six hypotheses, hypotheses one to four proposed a direct relationship between the distinct Ansoff Growth Strategies namely market penetration, product development, market development and diversification and university performance. These hypotheses tested whether the implementation of each distinct strategy, significantly influenced the performance of chartered universities in Kenya. Hypothesis five examined the joint effect of Ansoff Growth Strategies, posit that joint implementation would enhance institutional outcomes. AGS, comprising market

penetration, product development, market development and diversification, are pursued by universities to achieve corporate objectives (Wachira, 2011). To achieve this, chartered universities either capitalize on existing academic programs or develop new ones to expand into established or emerging markets. They employ online and offline advertising, adopt innovative teaching methods and establish new campuses when resources permit expansion into new markets with existing products (Radu, 2016). To enhance student enrolment, universities introduce new programs through curriculum review, launch distance learning modes and develop academic offerings that respond to changing stakeholder demands. As a measure to address reduced government funding, universities engage in income-generating activities outside their traditional focus on teaching and research.

Hypothesis six sought to examine the effect of moderating role of funding policy, specifically fund generation and fund allocation mechanisms, in altering the relationship between AGS and performance. From a resource-based point of view, the things an organization owns like skilled staff, technology and equipment give it an edge over others and help it succeed (Ho & Peng, 2016), however, to reach its goals, the organization must not only have these resources but also know how to raise and use them effectively (Maritan & Lee, 2017). Based on these ideas, the study suggested that simply applying Ansoff's growth strategies is not enough to improve performance as what truly determines success is how university leaders raise, distribute and use their financial resources with effective funding helps universities attract more students, improve graduation rates, hire qualified lecturers, offer scholarships, increase research output and build partnerships with both local and international organizations.

The study states that Ansoff's growth strategies play a key role in improving how chartered universities in Kenya perform and shows that strategies like market penetration, product development, market development and diversification used either separately or together are important paths for university growth. At the same time, the study points out that funding policy has a big influence on how well these strategies work, since the availability and use of funds can strengthen or limit their overall impact on performance. Raising and using money wisely is very important for universities to meet their goals since when funds are limited, it can affect how many students a university can enroll, how many lecturers it can hire, the amount of research it can do

and its ability to work with other institutions, therefore, while Ansoff's framework offers a clear plan for growth, its success largely depends on the financial situation of the university.

2.6 Summary of Literature and Knowledge Gaps

Previous research in higher education shows that using Ansoff's growth strategies has greatly helped universities improve their performance as evidenced in a study by Njoroge et al. (2023) who found that when universities apply all four strategies market penetration, product development, market development and diversification they become more competitive, attract more students and achieve long-term stability, however, the study did not look at how financial and infrastructure challenges might affect the success of these strategies.

A study by Oduor and Achieng (2023) that looked at the financial and infrastructure challenges in public universities found that problems like lack of funds, poor facilities and outdated technology make it difficult for universities to put their growth plans and innovations into action as these challenges often cause delays, lower the quality of academic programs and make universities miss chances to stay competitive and grow. However, although their study brought out these challenges, it did not examine how universities can match their goals with the financial and infrastructure resources they actually have leaving a missing link of an important gap in understanding how funding policies can be improved to better support planning and strategy implementation. It also shows the need for more research on how funding policies can either help or limit universities in turning their growth plans into real, measurable progress, filling this gap could offer useful lessons on how better budgeting and financial management can make university strategies more effective and sustainable.

A study by Mwangi and Otieno (2022) provided clear evidence that using Ansoff's growth strategies helps universities grow and remain sustainable as they found that these strategies lead to more student enrollments, more sources of income and better academic performance and showed that applying approaches like market penetration, product development, market development and diversification can greatly improve how universities develop and compete. However, their study did not look into how these growth strategies work together with existing funding systems or university funding policies, leaving questions about whether such initiatives are financially practical and sustainable. Mutisya and Makokha (2021) also found that public

universities were already using Ansoff's growth strategies to expand their programs and reach more students, however, their research did not include private universities, making it difficult to apply the findings broadly and they also did not examine how funding policies or financial systems influence, support, or limit these strategic decisions. These gaps show that more detailed research is needed to look at how Ansoff's growth strategies work within different financial and policy environments, thus, providing an understanding of how funding conditions affect the success and results of these strategies will help explain why some universities perform better than others when trying to grow and improve.

Studies by Odhiambo (2020) and Kiptoo and Waiganjo (2019) point out the key problems facing Kenya's higher education sector, especially the decline in government funding and the heavy dependence on student tuition fees, however, these studies mainly described the challenges without suggesting practical solutions, while, Hussain et al. (2020) reviewed how Ansoff's growth strategies are used in different organizations and pointed out that these strategies have rarely been applied or studied in universities within developing countries, especially in Africa.

Literature reveals a critical gap in integrated research that examines the relationship between AGS and performance in higher education setting and the role of funding policy on the relationship as most studies either focus on AGS or financial issues in isolation. This study addresses the gap by examining the effect of AGS on performance of chartered universities in Kenya and the moderating effect of funding policy on the relationship in order to provide a detailed understanding of strategic adaptability in resource-constrained educational environments. Table 2.2 presents a summary of empirical literature and knowledge gaps and the focus of this study.

Table 2.2: Summary of Empirical Literature and Knowledge Gaps

Author(s)	Research Focus	Methodology	Key Findings	Knowledge Gaps	Current Study Focus
Njoroge et al. (2023)	Effect of combined Ansoff growth strategies on institutional competitiveness in Kenyan universities	Quantitative study; survey of university administrators	Collective application of AGS enhances competitiveness, student enrollment and sustainability	Limited exploration of how resource constraints affect implementation of AGS	Examines how the interaction between AGS and funding policy affects performance in chartered universities
Oduor & Achieng (2023)	Assessment of financial and infrastructural challenges in executing strategic initiatives in public universities	Case studies and financial analysis of selected public universities	Funding and infrastructure limitations are major barriers to effective strategy implementation	Insufficient analysis of how to align strategic growth with available resources	Examines moderating role of funding policy on the AGS–performance relationship
Mwangi & Otieno (2022)	Effects of Ansoff strategies on university growth and sustainability	Mixed methods; interviews and performance data analysis	AGS improves student numbers, revenue diversification and academic output	Does not consider interaction with financial policy or resource allocation	Integrates funding policy into AGS framework for chartered universities

Author(s)	Research Focus	Methodology	Key Findings	Knowledge Gaps	Current Study Focus
Mutisya & Makokha (2021)	Growth strategies and performance of universities in Kenya	Survey research	Some Kenyan universities have adopted Ansoff strategies to boost enrollment	Focused on public universities only; funding policy not considered	Covers both public and private universities; includes funding policy moderation
Odhiambo (2020)	Challenges in higher education in Kenya	Policy analysis	Universities face declining public funding and rising competition	Focused on challenges without linking them to strategic responses	Shifts from challenges to solutions testing strategy and funding interaction empirically
Hussain et al. (2020)	Application of Ansoff growth strategies in organizations	Literature review	Ansoff strategies provide structured pathways for growth	Limited application in higher education, especially in Africa	Adaptation and testing of Ansoff strategies in Kenyan university context
Kiptoo & Waiganjo (2019)	Financial management and sustainability of public universities	Descriptive research	Resource constraints and dependence on tuition and capitation limit sustainability	Did not consider strategy-performance relationship or moderating effects	Examines interaction between funding policy and strategic growth choices

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology used to achieve the study's objectives and describes the study location, target population, sample size and sampling procedures. The chapter also describes the data collection methods that were used outlining the validity and reliability issues addressed, the diagnostic tests conducted and the data analysis techniques applied.

3.2 Location of the Study

The research targeted 60 chartered universities comprising both public and private situated in various counties across Kenya.

3.3 Research Philosophy

The philosophical foundation of a research design whether it follows positivism or interpretivism is important for making sure the study's results are accurate and trustworthy and it helps guide how the research is carried out. Interpretivism focuses on the idea that reality is shaped by people's personal experiences and opinions, so it relies on qualitative methods like interviews to understand meanings and perspectives while positivism, on the other hand, assumes that reality exists independently of what people think and can be studied and understood using scientific methods (Jackson, 2013).

Positivist research relies on empirical observations, measurable data and statistical analysis to identify patterns and relationships and aligns with the quantitative approach which focuses on systematic data collection and numerical analysis to draw conclusions based on observable evidence. In a positivist approach, researchers start with predictions otherwise hypotheses based on existing theories and then test them using well-organized and structured research methods (Younas & Ali, 2020).

This study followed a positivist approach, meaning it aimed to stay objective while exploring how Ansoff's growth strategies, funding policies and university performance are related and was guided by three main theories Strategic Fit Theory (SFT), Resource-Based Theory (RBT) and Contingency Theory which helped shape the study's hypotheses. Data was gathered using

a structured questionnaire and statistical methods were used to test whether the proposed relationships in the hypotheses were true.

3.4 Research Design

According to Leavy (2017), social research is carried out in order to explore, describe, explain, evaluate and shape how people understand different issues, as such, the choice of the right research design is very important to make sure the study answers its questions properly and produces accurate, trustworthy and useful results (Creswell & Creswell, 2018). A research design acts as a plan that guides how data will be collected, measured and analyzed, ensuring the study follows a clear structure and logical flow (Babbie, 2020).

This study used an explanatory research design, which is suitable for studying cause-and-effect relationships between different factors (Saunders et al., 2019) and it aimed to find out how Ansoff's growth strategies comprising market penetration, market development, product development and diversification affect the performance of universities in Kenya and the design helped the researcher understand not just whether these strategies influence performance, but also how strong and in what direction those effects are (Neuman, 2014).

The study used a cross-sectional census survey, meaning data was collected once from all chartered universities in Kenya at the same time instead of selecting a few universities as a sample, the universities were included every one of them to get complete information and reduce errors that might come from sampling (Bryman, 2016b; Fowler, 2014). By combining this census approach with the explanatory research design, the study created a strong method for drawing reliable, evidence-based conclusions about how universities' strategic choices affect their overall performance (Creswell & Creswell, 2018).

3.5 Population of the Study

The study population comprised of 60 chartered universities in Kenya (CUE, 2022) as shown in Table 3.1 with institutions representing the unit of analysis where each university was represented by the Vice-Chancellor or a senior management officer designated by the vice-chancellors.

Table 3.1: Population of the Study

Chartered Universities	
Public Universities	**35**
Private Universities	**25**
TOTAL	**60**

Source: CUE (2022)

As presented in Table 3.1, the study targeted 35 public and 25 private chartered universities due to their established status and were expected to have structured funding policies and implemented growth strategies designed to enhance their performance. Considering the likelihood of non-responses from the 60 chartered universities in Kenya, this study adopted a census survey in order to meet the minimum requirement of 30 study units to conduct regression analysis and other statistical techniques as recommended by Jackson (2013).

3.6 Data Collection

Primary data was collected from chartered universities in Kenya using a structured questionnaire to achieve the study objectives. The questionnaire had structured items designed to capture respondents' views on Ansoff growth strategies, funding policy and university performance on a five-point Likert scale, which ranged from 1 = Strongly Disagree to 5 = Strongly Agree, to measure the extent of agreement and disagreement with the given statements. This scaling technique was preferred as it enables the collection of quantifiable data on perceptions and attitudes, thereby facilitating statistical analysis. Ratio-scale items were used to assess university performance which provided objective indicators of institutional outcomes. The questionnaire method which is commonly used in business and management research was adopted because it is widely recognized as a practical, cost-effective and efficient approach for gathering information from a large population and it is commonly used in business and management research (Zikmund et al., 2013).

The questionnaire was organized in four sections. Section A consisting of eight items (1 to 8), gathered anonymous data on respondents' institutional information and university details. Section B used a five-point Likert scale to collect data on Ansoff growth strategies as follows: Sub-section B (i) covered Market Penetration (MP) and included items (a) to (j), while sub-section B (ii) captured data on Product Development (PD) through items (a) to (e). Sub-section B (iii) addressed Market Development (MD) and featured items (a) to (j), while sub-section B

(iv) collected data on diversification strategy using items (a) to (k). Section C gathered data on funding policy. Funds generation policy was captured in sub-section C (i) using items (a) to (j) and funds allocation policy reflected in sub-section C (ii) through items (a) to (n). Data in sections B and C had Likert scale questions which were preferred as they possessed interval properties, producing data that was assumed to be in interval scale (Wu & Leung, 2017). Section D on the other hand collated ratio data on measures of university performance as listed on items (a) to (f).

Ethical and regulatory compliance was observed prior to the commencement of the main data collection. A formal authorization was obtained from the National Commission for Science, Technology and Innovation (NACOSTI) in accordance with national research guidelines upon review and approval of the study's ethical protocols. A research permit (Appendix C) was subsequently issued by NACOSTI to facilitate access to the participating universities and respondents. This process ensured that the study upheld ethical standards governing academic research in Kenya which includes voluntary participation, confidentiality and integrity in handling data and respect for participants' rights.

One respondent was targeted in each University as the unit of analysis in this study was the organization. The potential respondents were Vice-Chancellors (VCs) of the Universities or other executive officers of the university including Deputy Vice-Chancellors and Registrars as was advised by the VC's Office on the senior manager to complete the questionnaire as they were considered to be informed about strategic university issues.

Trained research assistants under the researcher's supervision carried out data collection using a drop-and-pick-later approach in order to enhance convenience and improve response rates. The research assistants personally delivered the questionnaires to respondents which was accompanied by an introduction letter to facilitate access and cooperation. This allowed respondents sufficient time to complete the questionnaires at their convenience, after which the completed instruments were collected by research assistants the within an agreed timeframe. This approach provided respondents with sufficient time to provide well-considered responses thereby minimized disruption of university operations and enhanced respondent cooperation.

3.7 Operationalization of Study Variables

Supported by existing literature various measures were used to gather information on the study variables borrowed from past studies where Ansoff growth strategies (AGS) covered market

penetration (MP), market development (MD), product development (PD) and diversification, as identified by Ansoff (1987) and respondents were required to indicate their level of agreement or disagreement on how accurately each statement described their university on a five-point Likert scale. The responses were assigned values ranging from 1 to 5, with 1 representing strongly disagree and 5 representing strongly agree.

Funding policy the study's moderating variable comprised funds generation policy and funds allocation policy, as outlined by the World Bank (2010) and Mgaiwa (2018) and respondents were also required to indicate their level of agreement or disagreement with statements relating to the guidelines that inform the sources and utilization of funds, using a five-point Likert scale. The responses were similarly coded from 1 = strongly disagree to 5 = strongly agree.

Dimensions for measuring university performance were adapted from prior studies (Nisar, 2015; Pruvot et al., 2015b; Rabovsky, 2012) which included number of students enrolled, graduation rates, number of faculty recruited, scholarships awarded, number of research publications and number of university local and international partnerships. These represent the traditional functions of teaching and research. Performance indicators were measured on a ratio scale and university performance was calculated as a weighted average of the indicators for three academic years (2018/2019 to 2020/2021). This approach provided historical data to assess the influence of Ansoff Growth Strategies and funding policy on performance.

A summary of the study variables, their corresponding indicators and measurement approaches is presented in Table 3.2.

Table 3.2: Operationalization of Study Variables

Variable	Indicators	Source	Measurement Scale	Questionnaire Items
Market Penetration	a) Flexible fee structures b) Integrated marketing c) Capacity building d) Alumni and prospect relationship management	Wambua and Mberia (2023); Sande and Waithaka (2020); Kuria and Waiganjo (2016); Boateng (2015)	Interval scale	Section B (i) (a-j)
Product Development	a) Research activities b) Curriculum Review c) New academic programs d) Digital learning development	Kibuine et al., (2022); Martínez & Fernández, 2021; Sande (2019)		Section B (ii) (a-e)
Market Development	a) Joint academic programs b) Geographical expansion c) International student recruitment d) New delivery modes	Oduor and Njuguna (2023); Kimeu and Irungu (2023); Muriuki and Wekesa (2022); Lee & Wang, (2020)		Section B (iii) (a-j)
Diversification	a) Horizontal Integration b) Concentric constrained c) Vertical Integration d) Conglomerate	Mutua et al., (2022); Kimani & Waweru, (2021); Fitri et al. (2019); Ekpoh & Okpa, (2017);		Section B (iv) (a-k)

Variable	Indicators	Source	Measurement Scale	Questionnaire Items
Funding Policy	(i) Funds Generation Policy (ii) Funds Allocation Policy	Munyoro et al. (2016); Garwe & Maganga (2015); Pruvot et al. (2015a) OECD (2012b); Salmi (2009); Johnstone (2003);	Interval scale	Section C (i) (a-j) Section C (ii) (a-n)
University Performance	a) Number of students enrolled b) Number of students completing study program c) Number of faculty recruited d) Number of students on university scholarship e) Number of research publications f) Number of university collaborations	Ho and Peng (2016); Mukhwana et al. (2016); Nisar (2015); Pruvot et al. (2015b); Rabovsky (2012); Khosroabadi et al. (2012)	Ratio Scale	Section D (a-f)

3.8 Validity and Reliability

Reliability and validity are important features that indicate the consistency of a method or test in measuring what it intends to measure. Failing to assess these features can make it difficult to describe the effect of measurement errors on theoretical relationships being studied (Mohajan, 2017). The reliability and validity of the data collection instruments is assessed to ensure the quality of data collected.

3.8.1 Validity

Validity is the degree to which an instrument measures what it is intended to measure and the accuracy with which it captures the underlying constructs through internal validity and external validity (Creswell & Creswell, 2018). Internal validity evaluates whether the results of the study are credible and free from bias, while external validity examines the generalizability of the findings to other populations or settings (Mohajan, 2017).

The validity of the instrument was assessed through content or face validity and construct validity where content validity was used to examine the adequacy of the concept's domain in the questionnaire items ensuring that the instrument covers all relevant aspects of the constructs under investigation (Sekaran & Bougie, 2016) and was assessed through expert review by senior scholars in the Faculty of Commerce at Egerton University whose feedback informed refinement of the questionnaire, improving clarity, alignment and comprehensiveness of the items.

Construct validity was conducted to examine the degree to which measurement of the instrument accurately reflects the theoretical constructs being studied. Exploratory factor analysis (EFA) one of the most common methods for establishing construct validity was employed to test construct validity. Items with factor loadings above 0.30 were retained, as they were considered to meaningfully contribute to their respective constructs (Hair et al., 2014) confirming that the items aligned well with the theoretical structure of Ansoff growth strategies, funding policy and university performance.

A pilot study was conducted prior to the main data collection, as a measure of both validity and reliability check (Carter, 2019). Six chartered universities randomly selected from the target population participated in the pilot study, representing approximately 10 percent of the projected sample size, consistent with practice in social science research (Connelly, 2008). To minimize selection bias, a lucky dip randomization method was used to select the universities

providing each chartered university an equal chance of inclusion. the universities that participated in the pilot were excluded from the final survey to protect the integrity of the main study.

The pilot study was not only a basis for assessing reliability but also provided feedback to improve ambiguous questions, tested the clarity, sequencing and relevance of the questionnaire items and also confirmed that the instrument captured the intended constructs. Cronbach's alpha coefficients were computed for the major constructs, including Ansoff Growth Strategies, funding policy and university performance and all the coefficients exceeded the recommended threshold of $\alpha \geq 0.70$ (Nunnally & Bernstein, 1994), confirming that the measurement scales were internally consistent and reliable.

In summary, the validity of the study was established through expert review, exploratory factor analysis and pilot testing, while reliability was confirmed through Cronbach's alpha. collectively, these procedures ensured that the research instrument was both conceptually sound and empirically sound, providing confidence in its application to the main study.

3.8.2 Reliability

Reliability refers to the degree to which a research instrument steadily produces stable and dependable results when repeated under similar conditions (Creswell & Creswell, 2018). A reliable tool reduces measurement error ensuring that variations in responses reflect true differences in the underlying constructs rather than inconsistencies in the tool itself. Reliability can be assessed through test–retest, split-half and Cronbach's alpha coefficient (Chakrabartty, 2013). Cronbach's alpha (α), was used to test reliability as it is the most widely used method for evaluating internal consistency in social science research. Cronbach's alpha measures the extent to which items on a scale are correlated with one another, hence examining whether they consistently capture the same construct. Coefficient values range from 0 to 1, where a value of 0 indicates no internal consistency, 1 indicates perfect internal consistency and values of $\alpha \geq 0.70$ are generally considered the minimum acceptable threshold for research instruments (Hair et al., 2014; Mohajan, 2017).

A pilot study from six chartered universities was conducted to pre-test the instrument and the Cronbach's alpha coefficients computed for each major construct. The results indicated high reliability: Market penetration strategy ($\alpha = 0.813$), product development strategy ($\alpha = 0.806$), market development strategy ($\alpha = 0.901$), diversification ($\alpha = 0.792$), funds generation policy

(α = 0.835) and funds allocation policy (α = 0.764). The pilot study's overall reliability coefficient was α = 0.802 and exceeded the recommended threshold, confirming strong internal consistency of the instrument and the results are presented in Table 3.3.

Table 3.3: Reliability

Variable	Number of Items	Cronbach's Alpha
Market Penetration Strategy	10	0.813
Product Development Strategy	5	0.806
Market Development Strategy	10	0.901
Diversification	11	0.792
Funds Generation Strategy	10	0.835
Funds Allocation Strategy	14	0.764
Overall Cronbach Coefficient	**54**	**0.802**

The results in Table 3.3 show that the Cronbach's Alpha coefficient of at least 0.7 for the questionnaire items implying that the questionnaire is able to yield consistent results each time it is used.

3.9 Data Analysis and Presentation

To test the study hypotheses, cross-sectional data was obtained from 47 chartered universities in Kenya. Primary data collected was subsequently edited, coded and checked for errors and omissions in line with standard procedures in order to ensure completeness and consistency (Cooper & Schindler, 2014). The Statistical Package for Social Sciences (SPSS) Version 26, was used for data analysis which facilitated computation of both descriptive and inferential statistics. Owing to its robustness, versatility and wide applicability in social science research, SPSS was considered ideal making it suitable for analyzing both descriptive and multivariate data.

Descriptive statistics, comprised of frequencies, means and standard deviations, which were computed to provide a profile of the universities and the research variables. Pearson's product-moment correlation was computed to examine the relationships among Ansoff growth strategies, funding policy and university performance. Creswell and Creswell (2018) suggests that a weak correlation ranges between 0.1 and 0.3 implies, a moderate correlation ranges between 0.4 and 0.6, a strong correlation ranges between 0.7 and 0.9 while a coefficient of zero

implies no relationship and a coefficient of 1 indicates a perfect relationship. A negative coefficient implies an inverse relationship and a positive coefficient reflects a direct relationship between variables (Saunders et al., 2019).

Simple regression, multiple regression and Model 1 in the PROCESS macro techniques were used to test the study hypotheses where the direct effect of distinct AGS on performance was tested using simple regression, multiple regression was used to test the joint effect of AGS on university performance while the PROCESS macro was specifically employed to test the moderating effect of funding policy and provided a more rigorous and precise method for analyzing moderated effect as compared to standard regression techniques, as it explicitly modelled the interaction effects, incorporated bootstrapping procedures and generated confidence intervals, thereby minimizing the risk of Type I and Type II errors (Hayes, 2018). PROCESS macro also generated interaction plots and Johnson–Neyman outputs, which facilitated interpretation of moderation effects across different levels of the moderator.

While other statistical models such as hierarchical regression, generalized linear models (GLM) and structural equation modeling (SEM) are also widely applied in testing moderation and mediation effects (Byrne, 2016; Kline, 2015), these approaches often require larger sample sizes and more complex distributional assumptions. In contrast, the PROCESS macro was considered more appropriate for this study because it is regression-based, practical for medium-sized samples and capable of generating robust estimates with greater statistical rigor (Hayes, 2018; Hayes & Rockwood, 2020; Zhao et al., 2010). Overall, the combination of SPSS Version 26 for descriptive and inferential analysis and the PROCESS macro for moderation analysis, ensured that the data analysis was both methodologically rigorous and aligned with the objectives of the study.

The first hypothesis; H_{01} stated that the market penetration strategy does not have significant effect on university performance. To test hypothesis one, simple linear regression analysis was conducted to establish the effect of market penetration strategy on university performance as shown in model 3.1:

$$Y = \beta_0 + \beta_1 x_1 + \mathcal{E} \quad \text{..} \quad (3.1)$$

Where:

Y = University performance

β_0 = Y intercept

β_1 = Regression coefficient

x_1 = Market penetration strategy

$\mathcal{E}$ = Error term

Hypothesis H_{02} proposed that the product development strategy does not have significant effect on university performance. To test Hypothesis two, simple linear regression analysis was conducted to establish the effect of product development strategy on University performance as shown in model 3.2:

$$Y = \beta_0 + \beta_2 x_2 + \mathcal{E} \quad \text{...} \quad (3.2)$$

Where:

Y = University performance

β_0 = Y intercept

β_2 = Regression coefficient

x_2 = Product development strategy

$\mathcal{E}$ = Error term

Hypothesis H_{03} predicted that the market development strategy does not have significant effect on university performance. To test Hypothesis three, simple linear regression analysis was conducted to establish the effect of product development strategy on University performance as shown in model 3.3:

$$Y = \beta_0 + \beta_3 x_3 + \mathcal{E} \quad \text{...} \quad (3.3)$$

Where:

Y = University performance

β_0 = Y intercept

β_3 = Regression coefficient

x_3 = Market development strategy

$\mathcal{E}$ = Error term

Hypothesis H_{04} posited that the diversification strategy does not have significant effect on university performance. To test Hypothesis four, simple linear regression analysis was conducted to establish the effect of diversification strategy on University performance as shown in model 3.4:

$Y = \beta_0 + \beta_4 x_4 + \mathcal{E}$ …………………………..……………………..…………………… (3.4)

Where:

Y = University performance.

β_0 = Y intercept.

β_4 = Regression coefficient.

x_4 = Diversification strategy.

$\mathcal{E}$ = Error term.

Hypothesis H_{05} proposed that Ansoff growth strategies jointly do not have significant effect on university performance. To test this hypothesis, multiple regression analysis was employed as shown in model 3.5:

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \mathcal{E}$ ……….……………..……………………… (3.5)

Where;

Y = University performance

β_0 = Y intercept

$\beta_1 - \beta_4$ = Regression coefficients

x_1 = Market penetration strategy

x_2 = Product development strategy

x_3 = Market development strategy

x_4 = Diversification strategy

$\mathcal{E}$ = Error term

Hypothesis H_{06} proposed that funding policy does not have significant moderating effect on the relationship between Ansoff growth strategies (AGS) and university performance. To test this hypothesis, Model 1 in the PROCESS macro was applied as shown in model 3.6:

$Y = \beta_0 + \beta_1 X + \beta_2 M + \beta_3 (XxM) + \mathcal{E}$ …………….………..………………………… (3.6)

Where:

Y = University performance

X = Ansoff growth strategies

M = Funding Policy

$X\ x\ M$ = The interaction term

β_0 = Y Intercept

β_1 - β_3 = Regression coefficients

$\mathcal{E}$ = The error term

The moderating effect of funding policy on the relationship between Ansoff Growth Strategies and university performance was tested using Hayes' PROCESS macro Model 1 in SPSS Version 26. The technique was preferred over Hierarchical Regression because it is regression-based, computationally efficient and provides bias-corrected bootstrapped confidence intervals for more reliable significance testing, especially with moderate sample sizes or non-normal data (Hayes, 2018; Field, 2018). While the hierarchical regression requires manual stepwise entry of variables, PROCESS macro automatically estimated the interaction term and change in explained variance (ΔR^2) within a single model, thereby minimized specification errors. Using PROCESS macro visual interaction plots were generated clearly illustrating how the relationship between Ansoff Growth Strategies and performance varies across different levels of funding policy. PROCESS macro's methodological rigor, computational simplicity and interpretive clarity, made it the most appropriate tool for this study.

To test the moderating role of funding policy on the relationship between Ansoff growth strategies and university performance, five structured steps were followed. First step involved variable entry where the independent variable (X) was the composite score of Ansoff Growth Strategies, comprising market penetration, product development, market development and diversification, the dependent variable (Y) was University Performance and the moderating variable (W) was Funding Policy.

The second step was creation of the interaction term: PROCESS Macro automatically generated an interaction term (X*W) between Ansoff Growth Strategies and Funding Policy to test whether funding policy influences the strength or direction of the relationship between growth strategies and performance. Step three involved estimation and significance testing where PROCESS macro computed the regression coefficients for the main effects (X and W) and the interaction effect (X*W), along with R^2 and R^2 change values to determine the additional variance in performance explained by the moderator. The F-statistic and p-values were used to assess model significance. In step four, bootstrapping was applied to obtain bias-corrected confidence intervals for the interaction effect, providing a robust test of statistical significance even when normality assumptions were not fully met. Interpretation of results was the final step where the significance and direction of the interaction term were used to determine whether funding policy significantly moderates the effect of Ansoff Growth

Strategies on university performance. The relationship between Ansoff growth strategies and university performance had a significant interaction ($p < 0.05$) indicating that performance varies depending on the funding policy level.

3.10 Regression Assumptions Tests

To ensure that the data satisfied the key regression assumptions, diagnostic tests were performed prior to conducting regression analysis guaranteeing the validity, reliability and interpretability of the regression results. The tests undertaken are outlined in the following subsections.

3.11.1 Normality of Data

Normality assumes that the residuals of the regression model are approximately normally distributed and was assessed using histograms, normal probability plots and statistical measures of skewness and kurtosis. The data was considered normally distributed if skewness and kurtosis values fell within the acceptable range of plus or minus two as recommended by George and Mallery (2010).

3.11.2 Linearity

Linearity assumes a linear relationship between the independent variables and the dependent variable. Scatter plots were used to examine residuals against predicted values for a random distribution of residuals around zero.

3.11.3 Multicollinearity

Multicollinearity was examined using Variance Inflation Factor and tolerance values to ensure that independent variables are not highly correlated to prevent distortion of regression coefficients. Multicollinearity was not a concern as noted since the Variance Inflation Factor values were below 10 and the tolerance values were above 0.1 indicated and fell within the acceptable limits recommended by Hair et al. (2014).

3.11.4 Homoscedasticity

Homoscedasticity was tested through scatter plots of standardized residuals against predicted values to ensure that the variance of residuals is constant across all levels of the independent variables and a random and uniform spread of residuals without systematic patterns confirmed that the assumption of homoscedasticity was met.

3.11.5 Independence of Errors

Using the Durbin–Watson statistic the assumption on independence was tested to ensure that residuals are not correlated with one another and a Durbin–Watson value close to 2.0 indicated that there was no autocorrelation among residuals as explained by Field (2018).

3.11 Diagnostic Test Results

Various diagnostic tests were conducted to ensure adherence to the assumptions of regression analysis. These tests included for normality, linearity, autocorrelation, heteroscedasticity and multicollinearity providing an accurate and reliable prediction of the relationship among the variables (Williams et al., 2013).

3.11.1 Results for Normality Tests

This study tested the normality of regression residuals using Histogram fitted with normality curve as well as Normal P-P plot. Figure 3.1 shows the histogram.

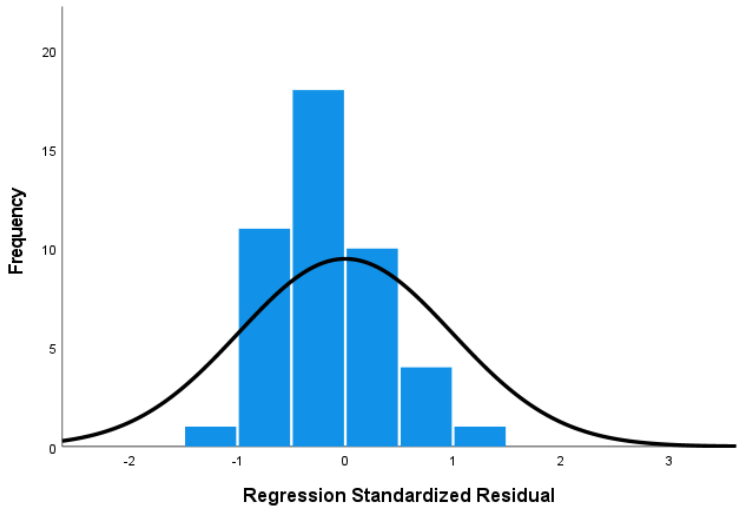

Figure 3.1: Histogram for Regression Standardized Residual - University Performance

The results indicate that the standardized residuals were fairly normal with majority of the error terms being around zero. This implies that the modelled data was normally distributed and thus meeting the normality assumption for the multiple linear regression. Figure 3.2 shows the results for the normal p-p plot also known as a Gaussian distribution.

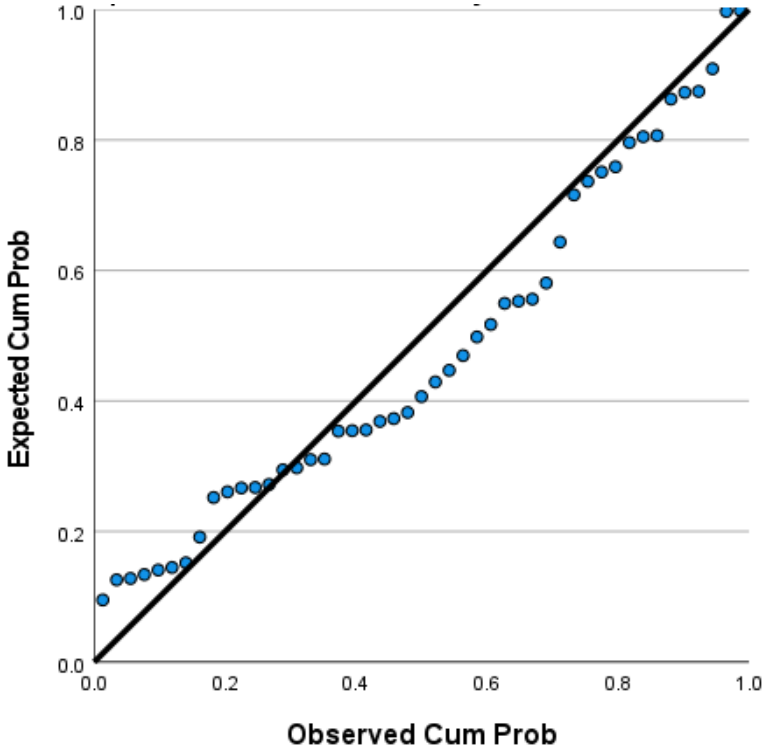

Figure 3.2: Normal P-P Plot of Regression Standardized Residual

Normal p-p plot essentially checked if the data points fell along a straight line on the plot, indicating a normal distribution pattern. The further the points deviate from this line, the less normal the data is considered to be. The regressed standardized residuals in Figure 3.2 indicates that the data is normally distributed since most of the values are around the line of best fit through the origin. Therefore, normality assumption was not rejected in this study with both histogram and normal p-p plot.

3.11.2 Results for Linearity Tests

Multiple linear regression operates on the assumption that data can be arranged linearly, establishing a linear relationship between the predicted values of the dependent variable and the independent variables. To assess this assumption, the study utilized a scatter plot, as illustrated in Figures 3.3 to 3.8.

This is a scatter plot showing the relationship between market penetration and university performance.

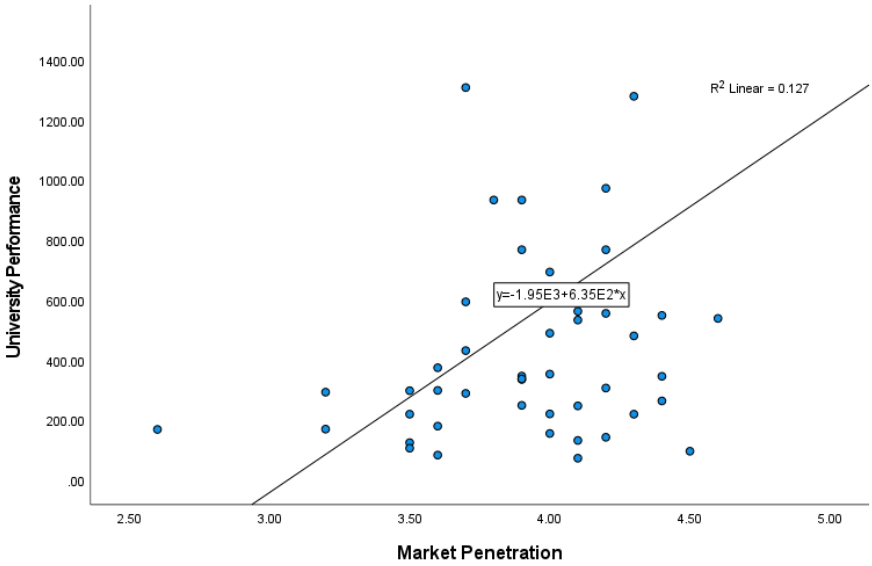

Figure 3.3: Scatter Plot for Linearity – Market Penetration

The scatter plot on Figure 3.3 showed a positive relationship between market penetration and university performance implying that higher market penetration is associated with university performance. The dispersion of points however, suggest that there are other factors that significantly contribute to university performance beyond market penetration. The scatter plot further indicates that while market penetration has some effect on university performance, it is not a strong predictor on its own. The upward sloping line and positive slope coefficient (6.35E2) reveal that the data trend is generally linear and therefore the linearity assumption was met.

The scatter plot on Figure 4.3 illustrates the relationship between product development and university performance**.**

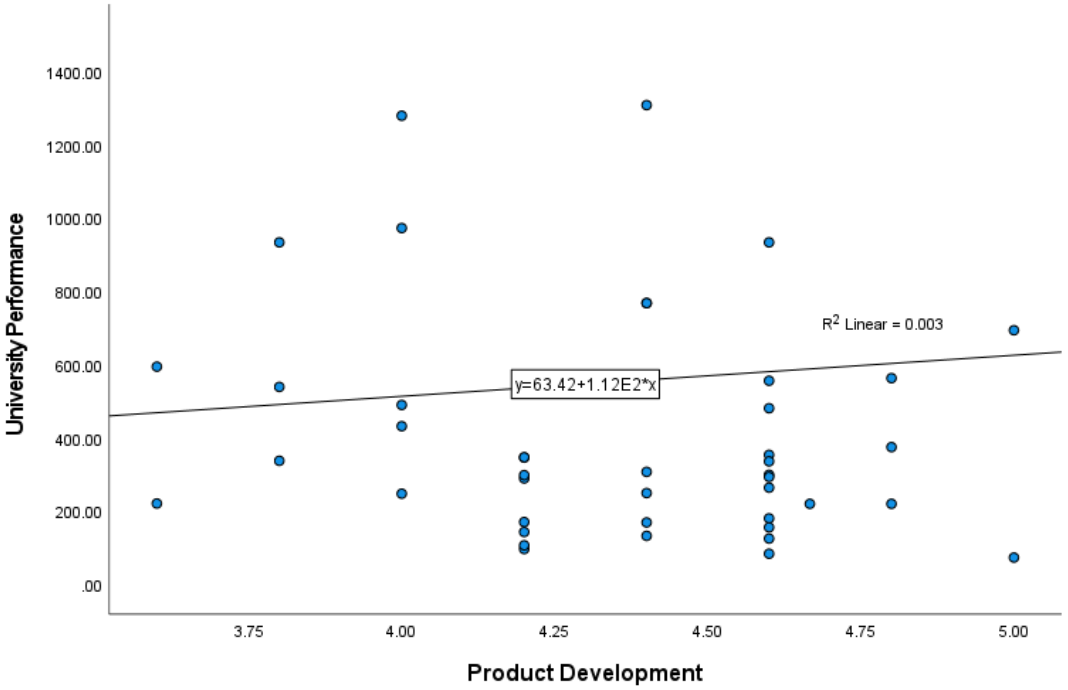

Figure 3.4: Scatter Plot for Linearity – Product Development

The regression line on Figure 3.4 showed a slightly positive slope with widely scattered data points indicating a very weak association between product development and university performance suggesting that product development alone does not have a significant effect on university performance and the low R^2 value (0.003) indicating that product development minimally contributes to explaining the variations in university performance. Other factors such as market penetration, funding policy and diversification likely have a more substantial effect. The scatter plot also illustrates that product development has a negligible effect on university performance with the wide spread of data points suggesting that other variables are more critical in determining performance outcomes. To gain a clearer picture, a multiple regression analysis incorporating additional predictors would be necessary.

Figure 3.5 illustrates the relationship between market development and university performance.

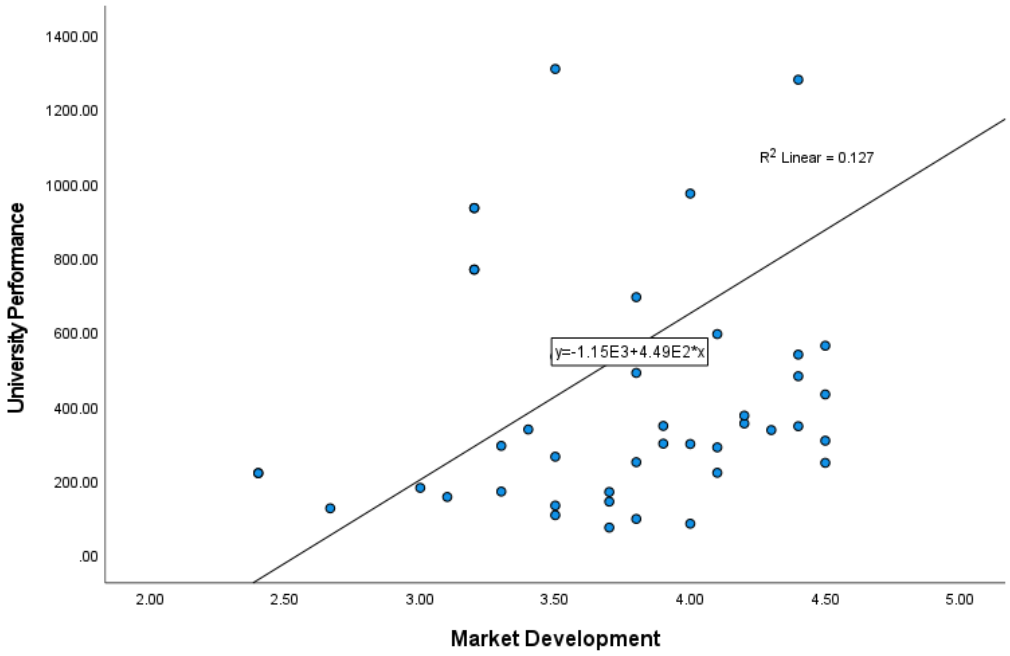

Figure 3.5: Scatter Plot for Linearity – Market Development

The R^2 value of 0.127 suggests a weak but positive relationship between market development strategy and university performance implying that market development explains 12.7% of the variation in university performance. The positive slope on the regression line indicates that higher market development is associated with increased university performance, although, the scattered data points suggests that other variables also play a significant role in influencing university performance. Market development has a relatively weak but positive effect on university performance, explaining only 12.7% of the variance. This implies that a combination of multiple factors may provide an understanding of the full scope of university performance. A multiple regression model would provide deeper insights into the relative contributions of different predictors.

The scatter plot on Figure 3.6 examined the relationship between diversification and university performance.

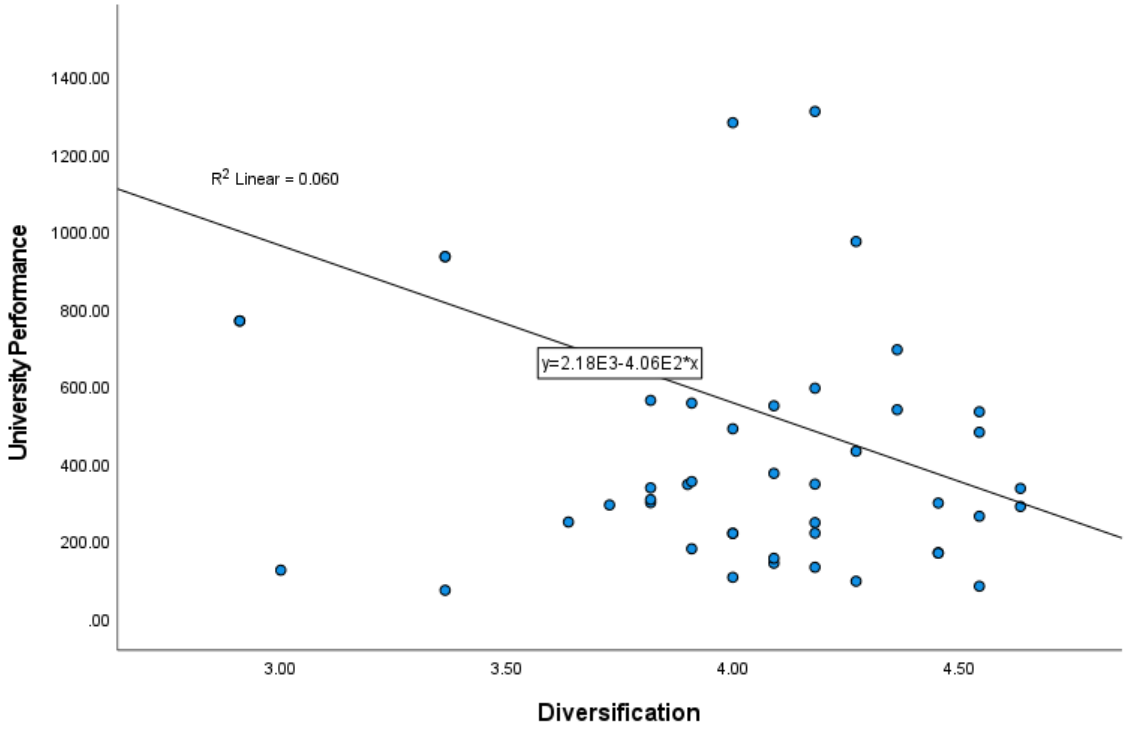

Figure 3.6: Scatter Plot for Linearity – Diversification

The R^2 value of 0.060 on Figure 3.6 indicates a weak negative relationship between diversification strategy and university performance, suggesting that diversification explains only 6% of the variation in university performance. The regression line has a negative slope, implying that as diversification increases, university performance declines and the slope (-4.06E2 or -406) suggests that a unit increase in diversification is associated with a decrease in university performance of approximately 406 units. The low R^2 value (0.060) indicates that diversification alone does not strongly predict university performance and that 94% of the variation in university performance remains unexplained, suggesting that other factors such as market penetration, product development and funding policy could have a stronger effect.

The results suggest that intensive diversification might lead to a slight decline in university performance, though the relationship is weak indicating that overemphasis on non-core income-generating activities such as consultancy may divert attention from academic excellence. Further analysis is needed to determine the low R^2, is significant in a broader context.

Figure 3.7 illustrates a scatter plot examining the relationship between joint Ansoff growth strategies and university performance.

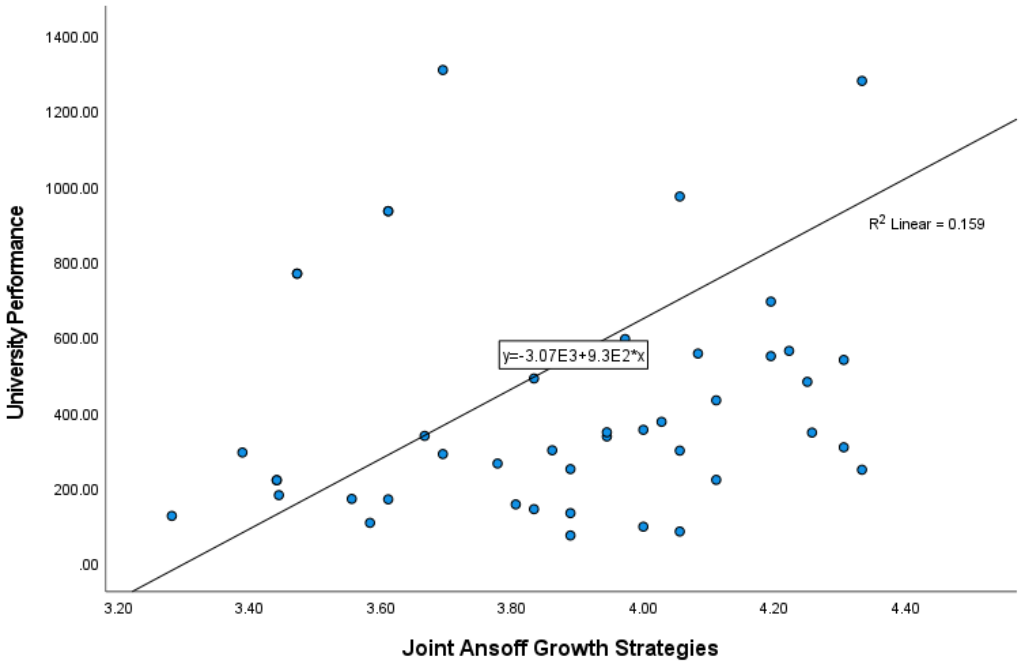

Figure 3.7: Scatter Plot for Linearity – Joint Ansoff growth strategies

The scatter plot on Figure 3.7 shows an R^2 value of 0.159 suggesting that 15.9% of the variation in university performance can be explained by Joint Ansoff growth strategies. The regression line has a positive slope (3.9E2 or 390), indicates that an increase in implementation of joint Ansoff growth strategies is associated with enhanced university performance. The equation y = 3.07E3 + 3.9E2x suggests that University Performance increases by approximately 390 units for every unit increase in implementation of joint Ansoff growth strategies. The scatter plot Although the R^2 value (0.159) is relatively low, it is higher compared to individual Ansoff growth strategies such as market development suggesting that a combination of market penetration, product development, market development and diversification strategies significantly contributes more to university performance as compared to each strategy in isolation. The findings further suggest that while universities that integrate multiple Ansoff growth strategies experience better performance outcomes, the variation of 84.1% in university performance remains unexplained implying that additional factors such as funding policies, among other factors not included in the study may also influence performance.

The scatter plot on Figure 3.8 examines the relationship between funding policy and university performance.

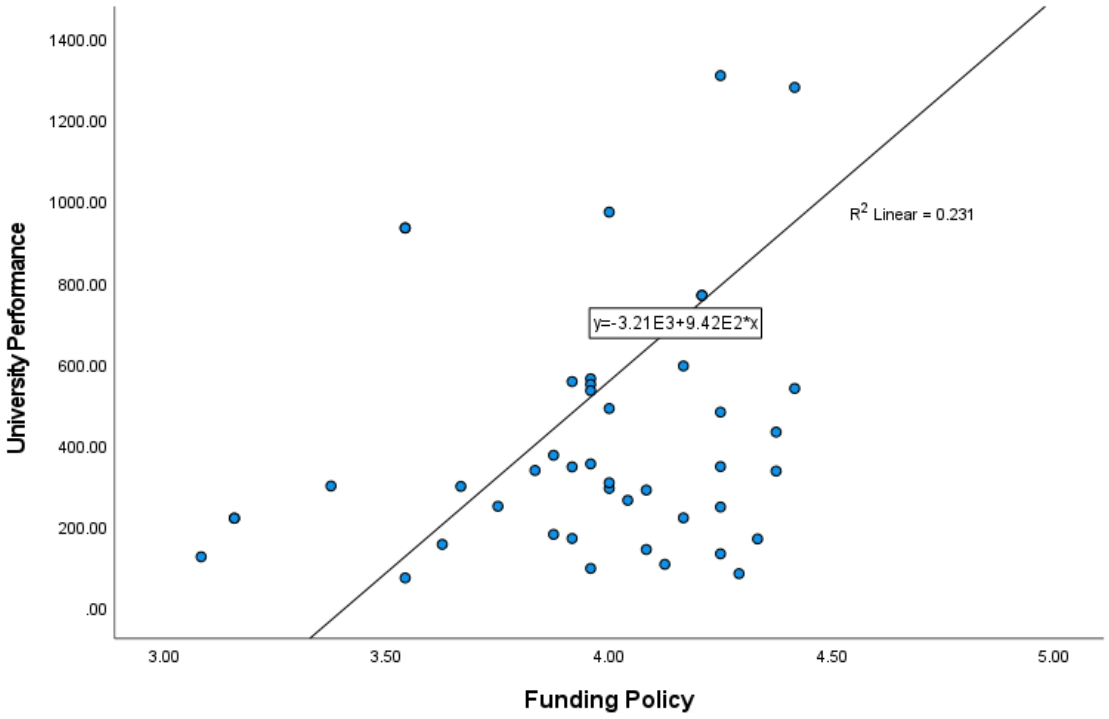

Figure 3.8: Scatter Plot for Linearity – Funding Policy

Figure 3.8 indicates that university performance improves by approximately 942 units for every unit increase in funding policy at y = -3.21E3 + 9.42E2x with the positive slope (9.42E2 or 942) confirming that better funding policies lead to enhanced university performance. The results further reveal that R^2 value (0.231) is the highest among the independent variables analyzed suggesting that funding policy significantly determines university performance compared to the other factors considered. The findings suggest the 23.1% of the variation is explained by funding policy and 76.1% by other factors.

3.11.3 Results for Autocorrelation Tests

Autocorrelation assumes that error terms are independent of each other to prevent biased estimates and unreliable conclusions about the relationship between variables (Williams et al., 2013). A Durbin -Watson (DW) test was used to test for autocorrelation and the results are shown in Table 3.4.

Table 3.4: Durbin-Watson (DW) Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.673[a]	0.452	0.386	562.27833	1.884

a. Predictors: (Constant), Funding Policy, Product Development, Market Penetration, Diversification, Market Development

b. Dependent Variable: University Performance

As shown in Table 3.4, the Durbin-Watson (DW) value was 1.884 suggests that there is little or no significant autocorrelation in the error terms, confirming that the assumption of independence in the regression model is satisfied. Given that the DW statistic is within the acceptable range of approximately 1.5 to 2.5 as recommended by Keller (2018), the data meets the assumption of independence implying that the regression model's estimates are reliable and free from the distortions that autocorrelation might introduce, therefore, the findings derived from the model can be considered statistically valid and interpretable within the context of university performance.

3.11.4 Multicollinearity

in regression analysis the assumption of multicollinearity posits that predictor variables should not be highly correlated among themselves as high correlations can lead to unreliable estimates of regression coefficients and affect the statistical significance of predictors (Chatterjee & Hadi, 2015). Variance Inflation Factors (VIFs) was used to test for multicollinearity and the VIFs shows the level of multicollinearity that can be tolerated without affecting the results of the regression analysis. Results of the Collinearity Statistics are shown in Table 3.5.

Table 3.5: Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Market Penetration	0.836	1.196
	Product Development	0.936	1.069
	Market Development	0.479	2.089
	Diversification	0.847	1.180
	Funding Policy	0.527	1.896

Results for the collinearity statistics for the independent variables are presented in Table 3.5. The tolerance values ranged between 0.479 and 0.936, while the Variance Inflation Factor (VIF) values ranged between 1.069 and 2.089. According to O'Brien (2007), a VIF value below 4 or a tolerance value above 0.25 indicates an acceptable level of multicollinearity. Similarly, Hair et al. (2014) state that multicollinearity becomes problematic only when VIF exceeds 10 or tolerance falls below 0.1.

In this study, all VIF values were well below 10 and tolerance values were substantially above the 0.1 threshold, with the lowest tolerance being 0.479 for Market Development and the highest VIF being 2.089 for the same variable. These values are comfortably within acceptable limits, confirming that no serious multicollinearity exists among the independent variables. The results therefore indicate that the predictor variables market penetration, product development, market development, diversification and funding policy are sufficiently independent of one another. Consequently, the regression coefficients derived from the model can be interpreted reliably, as each variable contributes unique explanatory power to university performance. Thus, the assumption of no significant multicollinearity was met, supporting the robustness and validity of the subsequent regression analysis.

3.11.5 Heteroscedasticity

Another assumption of the multiple linear regression is that the variance of error term across the sample is constant otherwise homoscedastic (Williams et al., 2013). The study used Breusch-Pagan test to test for heteroscedasticity. This was done by performing regression analysis between the independent variables and the squared unstandardized residuals. The results of the regression model are shown in Table 3.6.

Table 3.6: Breusch-Pagan Test for Heteroscedasticity

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5712972278507.256	5	1142594455701.451	4.039	0.065[b]
	Residual	11598345703351.271	41	282886480569.543		
	Total	17311317981858.527	46			

a. Dependent Variable: Squared Residuals

b. Predictors: (Constant), Funding Policy, Product Development, Market Penetration, Diversification, Market Development

As illustrated in Table 3.6, the p-value of 0.065 is greater than 0.05, the data did not show significant heteroscedasticity. This indicated that the regression model met the assumption of homoscedasticity, ensuring that the standard errors are reliable and that the model's inferences remain valid. As a result, the estimated coefficients and hypothesis tests can be interpreted with confidence.

CHAPTER FOUR
RESULTS

4.1 Introduction

The chapter presents the study findings in respect to response rate, demographic information, descriptive statistics, inferential statistics and discussion of the findings. The main aim of this study was to examine the effect of Ansoff growth strategies on the performance of chartered universities in Kenya. In addition, the study investigated the moderating effect of funding policies on this relationship.

4.2 Response Rate

The study population consisted of 60 chartered universities in Kenya. Although a census approach was adopted for the main study, a pilot study was first conducted using 6 universities, representing 10% of the population consistent with scholarly recommendations for pilot studies which suggest using approximately 10% of the total sample (Connelly, 2008). To prevent data contamination, the universities involved in the pilot study were excluded from the final data collection reducing the target population for the main study to 54 chartered universities. The response rate obtained from the study is presented in Table 4.1.

Table 4.1: Response Rate

Chartered Universities	**Response**	**Response Rate**
Public Universities	29	90.6%
Private Universities	18	81.8%
Overall	**47**	**87.0%**

As shown in Table 4.1, out of the 54 chartered universities targeted for the study, responses were obtained from 47 universities, yielding an overall response rate of 87.0%. Baruch and Holtom (2008) suggest that a response rate of at least 60% is adequate for ensuring the generalizability of study findings to the target population in social science research. Given that this study achieved a response rate well above the recommended threshold, the findings are considered fully generalizable to chartered universities in Kenya.

An initial screening of the dataset revealed that no cases had more than 20% of responses missing and therefore no entries were excluded on the basis of excessive missingness.

However, for cases with between one and three missing items, mean substitution was employed to address the gaps. Given that the overall proportion of missing data was low at less than 5% and the missingness was assumed to be Missing Completely At Random (MCAR). This approach was deemed methodologically appropriate. To support this assumption, Little's MCAR test was conducted and yielded non-significant results ($p > 0.05$). As noted by Pigott (2001) and Schlomer et al., (2010), mean substitution is a valid method when missingness is minimal and random, as it preserves statistical power without substantially altering variable relationships.

4.3 Profile of the Chartered Universities in Kenya

The study aimed to identify the type of universities, whether public or private, the ownership structure of private universities, the qualifications offered in their academic programs and the coverage of their strategic plans. Table 4.2 presents the background information of the chartered universities in Kenya.

Table 4.2: Distribution of Universities by Type, Ownership, Qualifications Offered and Strategic Plan Coverage

Background Information		Frequency	Percentage
University Type	Public	29	61.7%
	Private	18	38.3%
	Total	47	100.0%
Nature of Private Ownership	Local	14	77.8%
	Foreign	4	22.2%
	Total	18	100.0%
Levels of Qualification Offerings	Certificate, Diploma, Undergraduate, Masters, PhD	24	51.1%
	Diploma, Undergraduate, Masters, PhD	23	48.9%
	Total	47	100.0%
University Strategic Plan Coverage	1-3 Years	7	14.9%
	3-5 Years	40	85.1%
	Total	47	100.0%

Table 4.2 shows that 61.7% of the universities were public while 38.3% were private. This implies that public chartered universities are more compared to private chartered universities in Kenya. The private universities were majorly locally owned at 77.8% local ownership and 22.2% foreign ownership. The study further found that more than half (51.15%) of the universities offered all levels of qualifications in their academic programs. It was also noted that 48.9% of the universities did not offer certificate level qualification in their academic programs.

The strategic plans for most of the chartered universities in Kenya covered a period of between three to five years as indicated by 85.1% of the universities. It was also revealed that strategic plan for 14.9% of the chartered universities spanned a period of one to three years. This therefore implies that most of the universities worked with a plan of between three years to utmost five years which is in congruence to most of the university leadership tenure.

4.4 Factor Analysis

Factor analysis was conducted to validate the measurement constructs used in the study. Factor analysis confirmed that market penetration KMO = 0.713, Bartlett's Test $p < 0.001$, product development KMO = 0.684, $p < 0.001$, market development KMO = 0.701, $p < 0.001$ and funds allocation Policy KMO = 0.729, $p < 0.001$ were suitable for further analysis, with items loading well on their respective components. Diversification was tested but did not meet the KMO threshold (0.421) and was excluded, while funds generation policy was not analyzed at all, as its KMO value (0.498) failed the minimum adequacy conditions. These constructs were nevertheless included at the preliminary stage to maintain methodological consistency and to demonstrate their measurement limitations.

Beyond construct validity, factor analysis also served the purpose of data simplification and reliability by retaining only items with acceptable loadings, thereby minimizing measurement error. Importantly, the study did not use the new factor scores from the reduction process in inferential analysis. Instead, composite variables were created from the validated items and used in correlation and regression models, consistent with the theoretical framework of Ansoff's Growth Strategies and funding policies.

Table 4.3 presents the Pattern Matrix Analysis for Market Penetration Strategy, which extracted four components through Principal Component Analysis with Promax rotation.

Table 4.3: Pattern Matrix Analysis for Market Penetration Strategy

Items	Component			
	1	2	3	4
a) The university restructured and spread fee payment in instalments.		.725		
b) The university adjusted tuition fees for particular programs to match those of other universities.		.818		
c) The university offered bursary to needy students.	.744			
d) The university used social media to promote existing academic programs.	.819			
e) The university used print media advertisement to promote existing academic programs.	.712			
f) The university engaged in electronic media advertisement of existing academic programs.		.573		
g) The university undertook staff training.			.790	
h) The university maintained valuable data about its stakeholders.				.877
i) The university shared information about its academic programs with its prospects.			.562	
j) The university shared information with its alumni about the university academic programs.			.711	

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

The results in Table 4.3 reveal that market penetration strategy among universities is driven by various activities with the first component relating to student financial support initiatives such as bursaries and flexible fee payment structures, reflecting the universities' efforts to enhance accessibility and enrollment. Component two on the other hand captures fee adjustment and media advertising activities, illustrating pricing and promotional strategies aimed at maintaining competitiveness while component three relates to staff training, emphasizing capacity building as part of market expansion and the fourth component highlights stakeholder

information management, suggesting the role of alumni engagement and data-driven communication in sustaining student recruitment and retention. Table 4.4 shows that Product Development Strategy Pattern Matrix yielded three distinct components.

Table 4.4: Pattern Matrix Analysis for Product Development Strategy

Items	Component		
	1	2	3
a) Research and development activities informed the university's understanding of its customer needs.	0.885		
b) The university undertook curriculum review of its academic programs.		0.551	
c) The university developed new academic programs.	0.882		
d) The university developed of online academic programs.		0.915	
e) The university developed distance learning academic programs.			0.950

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

As indicated in Table 4.4 the first component, comprising research and program development items, indicates that universities rely heavily on research and development to design new programs aligned with market needs. The second component captures curriculum review and online program development, reflecting adaptation to changing educational delivery methods, while the third component emphasizes distance learning, underscoring the growing importance of flexible modes of education in expanding institutional reach. Table 4.5, the Pattern Matrix for Market Development Strategy identified four components that explain how universities expand their market base.

Table 4.5: Pattern Matrix Analysis for Market Development Strategy

Items	Component			
	1	2	3	4
a) Social media platforms were used to promote university academic programs and services.			.890	
b) The university website appeared high on the list of search engines results such as Google.			.678	
c) The university used pay per click advertising or its products and services.	.695			
d) The university undertook search engine advertising for its products and services.	.648			
e) The university offered joint programs with other institutions.				-.523
f) The university offered its courses to international students.		.938		
g) New university campus colleges were set up in different counties in Kenya	.936			
h) The university set up satellite campuses in other countries.	.854			
i) The university offered self-sponsored academic programs.				.574
j) The university adopted new modes of delivering existing academic programs such as online programs				.853

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Results in Table 4.5 indicate that component one comprises on digital advertising, including search engine and pay-per-click marketing demonstrating dependence on technology to attract new students. The second component points out internationalization efforts which include offering programs to foreign students, while component three represents geographical expansion through establishment of new campus colleges within Kenya. Component four

relates to innovation in delivery modes which include online learning, indicating universities' strategic adjustments to global trends in education. Table 4.6 shows five components extracted from the diversification strategy pattern matrix, suggesting that universities implement a wide range of diversification approaches.

Table 4.6: Pattern Matrix Analysis for Diversification Strategy

Items	Component				
	1	2	3	4	5
a) Social media platforms were used to promote university academic programs and services.		0.813			
b) The university website appeared high on the list of search engines results such as Google.			0.795		
c) The university used pay per click advertising or its products and services.	0.753				
d) The university undertook search engine advertising for its products and services.					0.924
e) The university offered joint programs with other institutions.			0.838		
f) The university offered its courses to international students.	0.700				
g) New university campus colleges were set up in different counties in Kenya				0.903	
h) The university set up satellite campuses in other countries.		0.792			
i) The university offered self-sponsored academic programs.				0.427	
j) The university adopted new modes of delivering existing academic programs such as online programs					0.550
k) The university set up job placement centers.	0.710				

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Results in Table 4.6 indicate that diversification involves investment in digital marketing, expansion into international and local markets through partnerships and satellite campuses and establishment of job placement centers, bringing out the various dimensions of diversification, combining both academic and commercial strategies aimed at broadening revenue sources and enhancing institutional visibility. Table 4.7 presents results for the five components from the Funding Allocation Policy Pattern Matrix Analysis.

Table 4.7: Pattern Matrix Analysis for Funding Allocation Policy

Items	Component				
	1	2	3	4	5
a) Delivery of distance and online education and/or e-learning courses.					.671
b) Online marketing of university programs		.659			
c) Offline marketing of university programs			.500		
d) Provision for university scholarships	.646				
e) Developing new courses					.767
f) Curriculum review			.874		
g) Expanding into new geographical areas.	.845				
h) Developing of university- foreign industry partnerships.	.793				
i) Developing of university-local institutional collaborations.				.499	
j) Developing of university-foreign institutional collaborations	.816				
k) Research Funding.				.818	
l) Intellectual property rights for research results.		.583			
m)Faculty training		.824			
n) Investment in commercial activities	.702				

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

The results in Table 4.7 indicate that funding allocation within universities supports multiple strategic areas, including delivery of online education, curriculum development, research and

innovation, institutional collaborations and staff training. These findings imply that universities strategically allocate resources to activities that enhance academic quality, institutional competitiveness and financial sustainability. Together, the factor analysis results across Tables 4.3 to 4.7 demonstrate that Kenyan universities employ differentiated but interrelated strategies in pursuing growth and sustainability. Each construct market penetration, product development, market development, diversification and funding allocation shows internal coherence and conceptual validity, supporting their use in subsequent regression analysis to test the hypothesized relationships in the study.

4.5 Descriptive Statistics of the Responses of the Study Variables

The independent variable in the study, Ansoff growth strategies was evaluated in terms of market penetration, product development, market development and diversification. The moderating variable is funding policy which was measured in terms of funds generation policy and funds allocation policy. University performance was the dependent variable and was measured with respect to the number of students enrolled, number of students completing study program, number of faculty recruited, number of students on university scholarship, number of research publications and in terms of the number of university collaborations. The independent variables as well as the moderating variable were measured using a five-point Likert scale whereby; 1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. With respect to this, Creswell and Creswell (2018) argues that a mean greater than 3.0 in such a Likert Scale, implies a tendency to average to agree with the corresponding statement while a mean less than 3.0 would essentially imply a tendency to disagree. On the other hand, a standard deviation less than 1.0 would imply consensus among the respondents while a standard deviation of between 1.0 and 1.5 would imply a moderate consensus. Creswell and Creswell (2018) argue that a standard deviation of more than 1.5 implies lack of consensus among the respondents across the rating scale.

4.5.1 Market Penetration

The study sought to establish the extent to which chartered universities in Kenya implemented market penetration strategies. Responses were measured on a 5-point Likert scale and interpreted based on Pimentel (2019), who reported that mean scores can be categorized as follows: Strongly disagree (1.00–1.79), Disagree (1.80–2.59), Neither agree nor disagree (2.60–3.39), Agree (3.40–4.19) and Strongly agree (4.20–5.00) as presented in Table 4.8.

Table 4.8: Descriptive Results for Market Penetration

Market Penetration	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std. Dev.
a) The university maintained valuable data about its stakeholders.	2.1	2.1	6.4	48.9	40.4	4.23	0.840
b) The university undertook staff training.	4.3	0.0	10.6	42.6	42.6	4.19	0.947
c) The university shared information about its academic programs with its prospects.	4.3	0.0	17.0	40.4	38.3	4.09	0.974
d) The university shared information with its alumni about the university academic programs.	2.1	4.3	8.5	53.2	31.9	4.09	0.880
e) The university engaged in electronic media advertisement of existing academic programs.	4.3	8.7	6.5	37.0	43.5	4.07	1.124
f) The university used social media to promote existing academic programs.	4.3	13.0	8.7	32.6	41.3	3.93	1.200
g) The university used print media advertisement to promote existing academic programs.	6.4	6.4	6.4	55.3	25.5	3.87	1.076
h) The university restructured and spread fee payment in instalments	6.4	8.5	14.9	38.3	31.9	3.81	1.173

Market Penetration	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std. Dev.
i) The university adjusted tuition fees for particular programs to match those of other universities.	8.5	10.6	6.4	57.4	17.0	3.64	1.150
j) The university offered bursary to needy students.	10.6	14.9	19.1	36.2	19.1	3.38	1.261
Composite Scores of Market Penetration						3.93	1.063

Table 4.8 presents the findings of the respondents' perceptions of the extent to which chartered universities in Kenya implemented market penetration strategies are presented in. With a composite mean score of 3.93 and SD = 1.063, respondents on average agreed that universities implemented market penetration strategies to a moderate and large extent suggesting that Kenyan universities are using communication, marketing and pricing initiatives to attract and retain students to grow in existing markets. With a Mean of 4.23 and SD = 0.840, the item on university maintaining valuable data about its stakeholders was the highest-rated implying that universities considered stakeholder relationship management as a strategic function and maintained databases that support targeted communication with current students, alumni and prospective applicants. These data-driven approaches enhance personalized engagement and are consistent with Ansoff's (1987) emphasis on understanding existing markets to deepen penetration.

With a Mean = 4.19 and SD = 0.947, respondents agreed that the university undertook staff training suggesting that human resource development forms a key component of internal marketing. This finding aligns with Agyei and Mtembu (2018) who argue that in order to enhance student satisfaction and strengthen institutional reputation, well-trained staff play an important role in improving service delivery and are critical for sustaining competitiveness in an increasingly market-driven higher education sector. High mean scores were also recorded for the university shared information about its academic programs with prospects (Mean = 4.09, SD = 0.974) and the university shared information with its alumni about academic

programs (Mean = 4.09, SD = 0.880), pointing out the rising need for transparency and continuous communication with both prospective and former students among universities. Consistent with the relationship marketing argument by Zehir and Zehir (2023), alumni networks particularly act as tools for supporting university's marketing efforts through reputation building and referrals.

Promotion-related indicators such as electronic media advertising and a Mean = 4.07 and an SD = 1.124 while social media promotion had a Mean = 3.93 and SD = 1.200 also attracted strong agreement implying that universities are increasingly optimizing the use of digital platforms to reach younger, tech-savvy audiences. Print media advertising (Mean = 3.87, SD = 1.076) had a slightly lower but positive rating suggesting a gradual shift from traditional to digital marketing channels. This finding is in line with Pucciarelli and Kaplan's (2016) who argue that universities must adopt contemporary marketing communication tools to remain visible in competitive educational markets.

Financial flexibility and affordability had moderate ratings (Mean = 3.81, SD = 1.173) with respondents moderately agreeing that the university restructured and spread fee payment in instalments and the university adjusted tuition fees to match those of other universities (Mean = 3.64, SD = 1.150). The findings indicate that while fee adjustments and installment options are part of universities' competitive strategies, institutional financial constraints and regulatory frameworks may limit their implementation. Offering bursaries to needy students recorded the lowest mean score (Mean = 3.38, SD = 1.261), suggesting that student financial aid is uniformly practiced across institutions and remains an area with potential for enhancement. The standard deviations of 0.840 to 1.261 across all items reflects a moderate variability in responses and implies some divergence in operationalization of market penetration strategies potentially due to differences in institutional size, resource base and strategic priorities.

In summary, the findings demonstrate that market penetration practices in universities in Kenya centered on communication, digital visibility and stakeholder engagement which are necessary in universities sustaining competitiveness in existing markets. On the other hand, the lower emphasis on tuition flexibility and financial aid suggests the need for more inclusive and affordable approaches. These results align with Ansoff's (1987) product–market framework, which identifies market penetration as the least risky yet foundational strategy for growth. Kenyan universities can therefore consolidate their market position by intensifying existing

market efforts to enhance brand loyalty and achieve sustainable enrollment growth despite financial and policy constraints.

4.5.2 Product Development

The study examined the extent to which research and development, curriculum review, new academic programs and online/distance learning initiatives as product development strategies are implemented in chartered universities in Kenya. Responses were measured on a 5-point Likert scale and interpreted using Pimentel (2019) who categorises scores are categorized as Strongly disagree (1.00–1.79), Disagree (1.80–2.59), Neither agree nor disagree (2.60–3.39), Agree (3.40–4.19) and Strongly agree (4.20–5.00). Table 4.9 present the descriptive results.

Table 4.9: Descriptive Results for Product Development

Product Development	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std Dev.
a) The university developed of online academic programs.	2.2	2.2	4.4	35.6	55.6	4.40	0.863
b) The university developed distance learning academic programs.	4.4	0.0	13.3	46.7	35.6	4.09	0.949
c) The university undertook curriculum review of its academic programs.	6.4	8.5	4.3	34.0	46.8	4.06	1.205
d) The university developed new academic programs.	0.0	12.8	8.5	38.3	40.4	4.06	1.009
e) Research and development activities informed the university's understanding of its customer needs.	4.3	10.6	10.6	55.3	19.1	3.74	1.031
Composite Scores of Product Development						4.07	1.011

Table 4.9 presents descriptive statistics results for product development strategies adopted by chartered universities in Kenya. With an overall composite mean score of 4.07 and SD = 1.011, respondents generally agreed that to a large extent universities had implemented product development initiatives. The findings reveal that most institutions actively engage in activities related to the introduction of new academic programs, revision of existing curricula and combining technology-enabled learning to respond to evolving market and stakeholder demands. The indicator regarding university developed online academic programs rated the highest with a Mean = 4.40 and SD = 0.863 indicating a strong institutional commitment to digital transformation. These findings indicate that universities' are increasingly adopting e-learning platforms and virtual delivery modes to respond to technological advancements

aligning with post-pandemic shifts in higher education, where digital programs have become essential for maintaining access and competitiveness.

The item on university developed distance learning academic programs recorded the second highest mean score of Mean = 4.09 and SD = 0.949 supporting the universities' efforts to expand reach beyond traditional on-campus delivery and a move toward inclusivity by catering to working professionals and students from remote regions. These findings demonstrate that universities are capitalizing on technology to expand delivery modes and are consistent with Ansoff's (1987) product development dimension, which lays emphasis on modification or innovating existing offerings to meet the needs of a changing market.

With a Mean = 4.06 and SD = 1.205, respondents also agreed that the university undertook curriculum review of its academic programs, the item on university developing new academic programs recorded a Mean = 4.06 and SD = 1.009. These results suggest that universities always review their programs to align with market expectations, national policy priorities and accreditation standards. Curriculum review and program innovation are essential elements of academic responsiveness that help institutions remain competitive in producing graduates with requisite skills to match the labor market. This corresponds with the arguments made by Kim and Mauborgne (2005), who point out that innovation and value creation vital components of institutional growth and differentiation.

The item regarding research and development activities informed the university's understanding of customer needs recorded the lowest mean score M = 3.74 the SD = 1.031 indicating that the direct linkage of research activities to program design and market analysis vary across institutions suggesting that while some universities demonstrate robust research-driven innovation, others rely more on administrative or regulatory directives than empirical market insights. This brings to light the need for universities to enhance the linkage between research output and product innovation, as proposed by Hitt, Ireland and Hoskisson (2017), who attribute long term growth with knowledge-based practices to market intelligence.

The standard deviations ranging from 0.863 to 1.205 across the five items indicate varing degrees of emphasis amongst most universities in the implementation of product development strategy. Such variation may result from differences in institutional resources, technological capacity, faculty expertise and strategic orientation. In general, these results reveal that product development strategy has been adopted by Kenyan universities as a key strategic priority,

centering on digital delivery modes and program innovation. The relatively lower emphasis on research-driven curriculum design on the other hand suggests that universities may need to become more proactive in using empirical research to guide academic product innovation when responding to market trends in order to enhance program relevance and quality as well as reinforce universities' competitiveness within the higher education marketplace.

4.5.3 Market Development

The study examined market development strategies employed by chartered universities in Kenya through collaborations, recruitment of international student, online and digital marketing efforts and expansion into new locations. Responses were measured on a five-point Likert scale and the means were interpreted using the ranges provided by Pimentel (2019): Strongly disagree (1.00–1.79), Disagree (1.80–2.59), Neither agree nor disagree (2.60–3.39), Agree (3.40–4.19) and Strongly agree (4.20–5.00). The results are presented in Table 4.10.

Table 4.10: Descriptive Results for Market Development

Market Development	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std. Dev
a) The university adopted new modes of delivering existing academic programs such as online programs	4.3	8.5	4.3	31.9	51.1	4.17	1.129
b) The university offered self-sponsored academic programs.	6.4	0.0	14.9	38.3	40.4	4.06	1.071
c) Social media platforms were used to promote university academic programs and services.	2.1	8.5	14.9	51.1	23.4	3.85	0.955
d) The university undertook search engine advertising for its products and services.	6.5	13.0	6.5	37.0	37.0	3.85	1.247
e) The university website appeared high on the list of search engines results such as Google.	6.4	8.5	4.3	59.6	21.3	3.81	1.076
f) The university offered its courses to international students.	8.5	12.8	4.3	38.3	36.2	3.81	1.296
g) The university offered joint programs with other institutions.	6.4	6.4	19.1	48.9	19.1	3.68	1.065
h) The university set up satellite campuses in other countries.	17.0	6.4	6.4	36.2	34.0	3.64	1.451

	Market Development	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
		%	%	%	%	%	Mean Score	Std. Dev
i)	New university campus colleges were set up in different counties in Kenya	17.0	2.1	14.9	34.0	31.9	3.62	1.407
j)	The university used pay per click advertising or its products and services.	10.6	17.0	14.9	36.2	21.3	3.40	1.296
	Composite Scores of Market Development						3.79	1.200

The findings in Table 4.10 presents descriptive statistics on market development strategies implemented by chartered universities in Kenya. The overall composite mean score of 3.79 (SD = 1.200) indicates that respondents generally agreed, to a moderate extent, that universities employed market development strategies. This suggests that institutions are making deliberate efforts to expand their reach into new markets and attract new student segments through digital marketing, internationalization and geographical expansion initiatives.

The item on the university adopted new modes of delivering existing academic programs such as online programs highest-rated with a Mean = 4.17 and SD = 1.129 implying that by adopting technologically-enhanced delivery modes particularly online and blended learning, universities reach wider audiences. This shift represents a deliberate strategic response to global competition, changing student preferences and disruptions caused by technological advancements. The result aligns with Ansoff's (1987) view of drawing upon existing products to reach new market segments, as well as Kim and Mauborgne's (2005) argument that new educational frontiers can be opened through innovation in delivery systems. The item on development of self-sponsored academic programs was also rated highly (Mean = 4.06, SD = 1.071), demonstrating that universities are targeting working professionals and non-traditional learners who finance their education privately to diversify revenue streams. Besides becoming an important pillar for financial sustainability in Kenya's higher education sector, this practice

also widens institutional scope beyond government-sponsored students (Mgaiwa, 2018; OECD, 2017).

Indicators related to digital visibility and online marketing, including the use of social media platforms to promote academic programs (Mean = 3.85, SD = 0.955), search engine advertising (Mean = 3.85, SD = 1.247) and enhanced website visibility on search engines such as Google (Mean = 3.81, SD = 1.076) recorded moderate levels of agreement. This is an indication that universities reach potential local and international students by increasingly utilizing digital marketing tools. The variability in mean scores and standard deviations on the other hand suggests that the intensity of adopting digital marketing differs across institutions, possibly as a result of resource constraints or differing levels of ICT capacity.

The results further reveal notable evidence on expansion of academic markets through internationalization and collaborations. With a Mean = 3.81 and SD = 1.296, respondents moderately agreed that universities offered courses to international students and offered joint programs with other institutions (Mean = 3.68, SD = 1.065) indicating that there is an emerging trend of cross-border collaboration and global positioning among universities in Kenya. The standard deviations indicate variations in the levels of international partnerships among universities, while other universities have made progress, others are limited by regulatory limitations.

Physical expansion initiatives recorded low mean ratings for the item on establishment of satellite campuses in other countries (Mean = 3.64, SD = 1.451) and a Mean = 3.62, SD = 1.407) for establishment of new campus colleges in different counties in Kenya. These findings suggest that financial limitations and recent government directives discouraging excessive spread of campuses are potential implementation bottlenecks. University used pay-per-click advertising for its products and services (Mean = 3.40, SD = 1.296) was the lowest-rated indicator suggesting that cost considerations and insufficient digital marketing expertise could limit the adoption of paid online advertising.

The respondents' views demonstrated moderate to high standard deviations (0.955–1.451) indicating variances in how market development is pursued by individual universities. These variations may be attributed to resource endowment, disparities in institutional size, ICT infrastructure and strategic priorities. In summary, the results reveal that market development strategies have moderately been embraced by Kenyan universities, with stronger emphasis

placed on digital delivery modes and program diversification rather than extensive physical expansion. This reflects a change toward technology-driven outreach and self-sponsored programs as more long term approaches to market growth. The findings align with Ansoff's (1987) product–market framework, that argues that enhancing institutional visibility and competitiveness can be achieved through extension of existing products into new markets using online platforms, enrolling international students, or collaborative programs. On the other hand, the relatively lower focus on international expansion and paid advertising suggests that strategic and financial constraints limit universities ability to fully exploit new market opportunities.

4.5.4 Diversification

The study examined various approaches chartered universities in Kenya adopt when implementing diversification strategies which include institutional acquisition, corporate consultancy, revenue generation activities, industry collaborations, scholarships and intellectual property royalties. This aimed at determining the extent to which universities expand beyond traditional teaching and research. Responses were analyzed using descriptive statistics, with mean scores interpreted on a five-point Likert scale according to Pimentel (2019): Strongly disagree (1.00–1.79), Disagree (1.80–2.59), Neither agree nor disagree (2.60–3.39), Agree (3.40–4.19) and Strongly agree (4.20–5.00). Results are presented in Table 4.11.

Table 4.11: Descriptive Results for Diversification

Diversification	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std Dev.
a) Besides teaching and research, the university ventured into other income generating activities.	0.0	2.1	8.5	46.8	42.6	4.30	0.720
b) The university was engaged by the corporate market to address their training needs.	2.1	4.3	12.8	40.4	40.4	4.13	0.947
c) The university partnered with other companies for revenue generating activities.	0.0	6.5	10.9	54.3	28.3	4.04	0.815
d) The university took over professional guidance and counselling activities in high schools.	0.0	4.3	17.0	48.9	29.8	4.04	0.806
e) The university ventured into university-industry collaboration.	4.3	4.3	14.9	44.7	31.9	3.96	1.021
f) The university set up job placement centers.	0.0	6.4	21.3	46.8	25.5	3.91	0.855
g) The university offered scholarships to college graduates.	10.6	8.5	8.5	31.9	40.4	3.83	1.340
h) University academic programs were customized to suit corporate needs.	6.5%	8.7	10.9	47.8	26.1	3.78	1.134

Diversification	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std Dev.
i) The university ventured into research consultancy services for companies.	4.3	8.5	17.0	46.8	23.4	3.77	1.047
j) The university acquired other learning institutions.	10.6	4.3	14.9	40.4	29.8	3.74	1.242
k) The university received loyalties on intellectual property.	10.6	14.9	19.1	31.9	23.4	3.43	1.298
Composite Scores of Diversification						3.90	1.020

The results in Table 4.11 presents the descriptive results for diversification strategies adopted by chartered universities in Kenya. The overall composite mean score of 3.90 (SD = 1.020) indicates that respondents agreed, to a large extent, that universities had implemented various diversification initiatives. This implies in pursuit of additional revenue streams, strategic partnerships and enhanced performance most universities are expanding their operational scope extending beyond their core functions of teaching and research.

Besides teaching and research, the item on university ventured into other income-generating activities rated highest with a Mean = 4.30 and SD = 0.720 implying that beyond core academic functions Kenyan universities consider diversification as a key strategic focus to supplement declining government funding through increased engagement in commercial enterprises such as consultancy services, real estate development, short professional courses and agribusiness ventures. These initiatives support Ansoff's (1987) principle that organizations can mitigate risk and grow by entering into new markets with new products through diversification.

The item on universities were engaged by the corporate market to address their training needs scored a Mean = 4.13 and SD = 0.947 while the item on the university partnered with other companies for revenue-generating activities having a Mean = 4.04 and SD = 0.815. These

results suggest that through customized executive programs, short courses and professional certifications, universities capitalize on their faculty to meet workforce training needs. This approach signals a shift toward entrepreneurial university models as described by Etzkowitz (2014).

With a Mean = 4.04 and SD = 0.806 respondents also agreed that the university took over professional guidance and counselling activities in high schools and that the university ventured into university-industry collaboration (Mean = 3.96, SD = 1.021). These findings indicate that an increase in universities' social and market engagement roles position universities as centers of higher learning but also as education and skills development stakeholders at the pre-university level. The results support Hitt, Ireland and Hoskisson's (2017) view that diversification promotes competitive advantage through collaboration and outreach.

With a mean of Mean = 3.91 and SD = 0.855 the item on the university setting up job placement centers recorded moderate levels of agreement and the item on the university offering scholarships to college graduates recording a Mean = 3.83 and SD = 1.340. These findings indicate actions to enhance graduate employability and strengthen the university brand through alumni and outreach initiatives. Establishing job placement centers and offering scholarships may also serve as indirect marketing strategies to attract prospective students and improve institutional reputation.

Customizing academic programs to suit corporate needs (Mean = 3.78, SD = 1.134) and venturing into research consultancy services for companies (Mean = 3.77, SD = 1.047), further demonstrate the rising business minded approach of Kenyan universities. The variability in standard deviations on the other hand suggests that while some institutions have advanced such collaborations, other universities still operate under traditional academic models with limited engagement with external stakeholders.

Other indicators with a low mean score for acquiring other learning institutions (Mean = 3.74, SD = 1.242) and receiving royalties on intellectual property (Mean = 3.43, SD = 1.298) suggesting that venters such as mergers, acquisitions and commercialization of intellectual property are yet to develop fully in Kenyan universities. The low rating on royalties indicates that commercialization of research outputs as an assurance of research-intensive and entrepreneurial universities globally is yet to gain strong institutional acceptance locally

probably due to weak patenting culture, limited research funding and inadequate intellectual property transfer mechanisms.

The findings reveal some variability in how universities implement diversification strategies with a moderate range of standard deviations (0.720–1.340) potentially as a result of variations in resource base, leadership orientation and institutional capacity. While the variation in public universities may be attributed to policy controls and budgetary constraints, private universities often have increased capacity for innovation and commercialization of academic outputs. In summary, these findings suggest that diversification has been moderately adopted by Kenyan universities as a strategic approach through income-generating activities, partnerships and corporate training initiatives. This reflects a response to the declining government funding and increasing competitive pressures in higher education. The results support Ansoff's (1987) view of diversification as a potentially high-return but high risk growth strategy, necessitating building new competencies and establishing cross-sectoral collaborations. However, the relatively low engagement in commercialization of intellectual property and institutional acquisitions indicates that diversification efforts are still developing but still limited by financial, structural and policy factors.

As such for universities to fully exploit diversification opportunities, there is need to strengthen institutional capacity for commercialization of research out, innovation centres and technology transfer. Such initiatives not only generate revenue but also enhance the universities' contribution to national development goals, aligning with Kenya Vision 2030 and the global agenda for knowledge-driven economies.

4.5.5 Funding Policy

The study examined the availability of financial policies within chartered universities in Kenya, focusing on elaborate funding policy, operational funding policy, policy guidelines on funds generation and policy guidelines on funds utilization with an aim of determining the extent to which structured policies on financial management were in place and known to respondents. The results are presented in Table 4.12.

Table 4.12: Availability of Funding Policy

Availability of;	Yes		No		Not sure	
	F	%	F	%	F	%
Elaborate Funding Policy	37	80.4	8	17.4	1	2.2
Operational Funding Policy	38	80.9	7	14.9	2	4.3
Policy Guidelines on Funds Generation	33	70.2	5	10.6	9	19.1
Policy Guidelines on Funds Utilization	28	60.9	12	26.1	6	13.0

The results in Table 4.12 indicate that a large majority of chartered universities (80.4%) had an elaborate funding policy while 17.4% reported none and 2.2% were not sure. In addition, 80.9% of universities had operational funding policies and 14.9% lacked them and 4.3% of respondents were uncertain. With regards to availability of policy guidelines on funds generation, 70.2% of universities confirmed their existence, 10.6% denied having them and 19.1% of respondents were unsure. On availability of policy guidelines on funds utilization, 60.9% confirmed availability, 26.1% reported none, while 13.0% were not certain.

In view of this, the findings indicate that although most universities have established elaborate and operational funding policies, gaps exist in awareness and consistency of funds generation and utilization policies which may hinder effective implementation of strategies, potentially affecting institutional sustainability.

4.5.5.1 Funds Generation Policy

Funding policy was further to examine the effectiveness of different sources of revenue in supporting institutional operations through funds generation policy, where universities rated various sources of funds on a five-point Likert scale ranging from Strongly Disagree (1.00–1.79) to Strongly Agree (4.20–5.00) following the interpretation framework of Pimentel (2019). The results are presented in Table 4.13.

Table 4.13: Descriptive Results for Funds Generation Policy

Funds Generation Policy	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean Score	Std. Dev.
a) Government capitation	4.3	4.3	2.1	51.1	38.3	4.15	0.978
b) Tuition fees (regular students)	4.3	2.1	14.9	42.6	36.2	4.04	0.999
c) Tuition fees (module II students)	6.4	6.4	19.1	40.4	27.7	3.77	1.127
d) Tuition from certificate & diploma courses	2.1	4.3	19.1	51.1	23.4	3.89	0.890
e) Consultancy Services	2.2	2.2	22.2	46.7	26.7	3.93	0.889
f) Hiring out university facilities	6.4	8.5	12.8	48.9	23.4	3.74	1.113
g) Leasing of university land	4.3	25.5	14.9	36.2	19.1	3.40	1.192
h) University-local partnership output	4.4	13.3	13.3	48.9	20.0	3.67	1.087
i) University-foreign partnership output	4.4	4.4	15.6	44.4	31.1	3.93	1.031
j) Commercialization of research output	6.7	6.7	13.3	48.9	24.4	3.78	1.106
Composite Scores of Funds Generation Policy						3.83	1.041

The descriptive statistics results on funds generation policy among chartered universities in Kenya are presented in Table 4.13. The overall composite mean score of 3.83 (SD = 1.041) indicates that respondents moderately agreed that their universities had adopted various strategies and policies for generating financial resources. This implies that while universities have made notable progress in diversifying revenue sources, the reliance on traditional funding streams mainly government capitation and tuition fees remains dominant.

Government capitation was the highest-rated indicator (Mean = 4.15, SD = 0.978), implying that the primary source of revenue for most universities is government funding and this finding aligns OECD (2017) and Mgaiwa (2018) observations who noted that public universities in developing countries, including Kenya, are heavily reliant on state allocations for their financial obligations. Owing to the decline in government funding amid competing national priorities there is need for universities to strengthen other revenue streams to ensure sustainability.

The results indicate that student fees are a significant component of university funding ans attributed by the indicator on tuition fees from regular students that scored a Mean = 4.04 and SD = 0.999 and tuition from certificate and diploma courses (Mean = 3.89, SD = 0.890), indicating that. This points to the growing emphasis on cost-sharing in higher education, where learners contribute directly to the cost of their education. On the other hand, the relatively high mean for certificate and diploma programs also highlights universities' efforts to broaden their market base by attracting working professionals and non-degree students to make up for income from traditional degree programs.

Respondents also agreed that income-generating avenues from consultancy services and university-foreign partnerships as reflected by the scores on consultancy services (Mean = 3.93, SD = 0.889) and university–foreign partnership outputs (Mean = 3.93, SD = 1.031). These findings point out the universities' increasing engagement with external stakeholders through international partnerships, collaborative research and professional consultancy resulting to enhanced institutional visibility and academic reputation. These findings aligns with the entrepreneurial university concept advanced by Etzkowitz, (2014) and Ansoff's (1987) which encourage the use of organizational capabilities and partnerships to access new markets and resources diversification framework,.

There was moderate agreement on commercialization of research output (Mean = 3.78, SD = 1.106), tuition fees from Module II students (Mean = 3.77, SD = 1.127) and hiring out university facilities (Mean = 3.74, SD = 1.113) suggesting that universities are moderately engaging in conference facility rentals, sale of intellectual property and venturing into commercial activities such as evening programs. The corresponding mean and standard deviations values point to differences across institutions, implying that while some universities have established these practices, others may lack structures, capacity, or incentives to fully utilize them.

Indicators on university-local partnership output (Mean = 3.67, SD = 1.087) and leasing of university land (Mean = 3.40, SD = 1.192) recorded relative low mean scores suggesting limited commercialization of physical assets and minimal collaborations with local industries. This could be attributed to administrative restrictions, legal issues surrounding public land ownership, or the absence of policy mechanisms to guide such partnerships. On the other hand, the high variability (SD > 1.0) indicates that there is an uneven adoption of these strategies across different institutions, owing to differences in governance structures, resource capabilities and business oriented perspective.

In summary, the results indicate that although is a gradual shift towards multiple sources funding mechanisms, Kenyan universities are still relying heavily on government funding and student tuition. The incorporation of consultancy, international collaborations and commercialization of research is an indication of shift toward entrepreneurial practices, although implementation varies across institutions. These findings align with Kieu et al. (2020) and Halbheer et al. (2019), who argue that a well-designed funding policy should blend traditional and innovative sources of revenue while maintaining the capacity to respond to new opportunities. To achieving long-term sustainability, there is need for Kenyan universities to strengthen financial independence through resource optimization, research commercialization and strategic partnerships.

4.5.5.2 Funds Allocation Policy

Table 4.14 presents results that sought to examine the availability and application of funds allocation policies in chartered universities in Kenya with respondents rating 14 areas of resource allocation on a five-point Likert scale ranging from Strongly Disagree (1.00–1.79) to Strongly Agree (4.20–5.00) (Pimentel, 2019).

Table 4.14: Descriptive Results for Funds Allocation Policy

Funds Allocation Policy	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean	Std. Dev.
a) Investment in commercial activities	2.2	4.4	4.4	37.8	51.1	4.31	0.925
b) Intellectual property rights for research results.	2.1	0.0	12.8	36.2	48.9	4.30	0.858
c) Provision for university scholarships	0.0	6.4	4.3	44.7	44.7	4.28	0.826
d) Research Funding.	0.0	2.1	10.6	46.8	40.4	4.26	0.736
e) Developing new courses	0.0	4.3	14.9	34.0	46.8	4.23	0.865
f) Curriculum review	2.1	2.1	12.8	36.2	46.8	4.23	0.914
g) Expanding into new geographical areas.	0.0	13.3	2.2	35.6	48.9	4.20	1.014
h) Delivery of distance and online education and/or e-learning courses.	6.4	2.1	6.4	38.3	46.8	4.17	1.090
i) Faculty training	2.1	6.4	14.9	27.7	48.9	4.15	1.042
j) Online marketing of university programs	8.5	2.1	10.6	34.0	44.7	4.04	1.197
k) Developing of university-foreign industry partnerships.	2.1	10.6	14.9	29.8	42.6	4.00	1.103
l) Developing of university-foreign institutional collaborations	0.0	14.9	10.6	36.2	38.3	3.98	1.053
m) Offline marketing of university programs	6.4	6.4	14.9	42.6	29.8	3.83	1.129

Funds Allocation Policy	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total	
	%	%	%	%	%	Mean	Std. Dev.
n) Developing of university-local institutional collaborations.	4.3	10.6	8.5	55.3	21.3	3.79	1.041
Composite Scores of Funds Allocation Policy						4.13	0.985

The descriptive results on funds allocation policy among chartered universities in Kenya are presented in Table 4.14. The overall composite mean score of M = 4.13 and SD = 0.985 indicates that respondents generally agreed that universities had established effective mechanisms for allocating financial resources across strategic priorities. The high mean suggests minimal variations in institutions alignment of their expenditures with activities that promote innovation, support academic quality and institutional competitiveness.

Investment in commercial activities was the highest-rated indicator (Mean = 4.31, SD = 0.925), revealing that universities are increasingly investing in entrepreneurial and income-generating activities. This finding supports the funds generation policy results indicating that universities not only seek to raise additional income but also reinvest those resources to sustain commercial activities. Such investments align with Ansoff's (1987) view of diversification as a growth strategy requiring financial resources to expand to new markets and products, as well as the entrepreneurial university model by (Etzkowitz, 2014), which promotes commercialization of academic assets to ensure long-term sustainability.

Allocation for intellectual property rights for research results (Mean = 4.30, SD = 0.858), highlights the increasing institutional understanding of research outputs as a source of economic value suggesting that universities are prioritizing the protection and commercialization of innovations through patents and licensing. Though, the mean is high, the moderate standard deviation implies that there are variations across universities in the levels of research commercialization, pointing out differences in research capacity and policy enforcement.

Indicators regarding provision for university scholarships (Mean = 4.28, SD = 0.826), research funding (Mean = 4.26, SD = 0.736), developing new courses (Mean = 4.23, SD = 0.865) and curriculum review (Mean = 4.23, SD = 0.914) were highly rated. These findings demonstrate that substantial resources are allocated towards research and award of student scholarships, which are core to universities' core mission. Placing emphasis on scholarships and research funding illustrates commitment to knowledge creation and equity suggesting that research is considered a driver of institutional reputation and innovation factors that enhance institutional performance and competitiveness (Hitt et al., 2017).

Indicators on expanding into new geographical areas (Mean = 4.20, SD = 1.014) and delivery of distance and online education and/or e-learning courses (Mean = 4.17, SD = 1.090) recorded moderately high mean values indicating that universities are allocating financial resources to support market growth and digital transformation. Investments in new campuses, online delivery systems and ICT infrastructure demonstrating response to changing environment and the need to attract new student segments consistent with Ansoff's market development and product development strategies.

Faculty training with a Mean of 4.15 and SD = 1.042 and online marketing of university programs (Mean = 4.04, SD = 1.197) also recorded high levels of agreement, suggesting that capacity building and brand visibility are considered key financial focus areas. Well-trained faculty enhance teaching quality and research output, while online marketing supports institutional positioning in an increasingly competitive educational market (Kim & Mauborgne, 2005; Porter, 1980).

Indicators on developing university-foreign industry partnerships (Mean = 4.00, SD = 1.103) and developing university-foreign institutional collaborations (Mean = 3.98, SD = 1.053) recorded high means indicating that there are consistent but uneven engagement in international collaborations aimed at promoting knowledge sharing, joint research and program development. The results further indicate lower mean scores for offline marketing of university programs (Mean = 3.83, SD = 1.129) and developing university-local institutional collaborations (Mean = 3.79, SD = 1.041) suggest that local partnerships and traditional promotion channels receive limited budgetary allocation, resulting from a strategic focus on digital outreach and international market development.

A standard deviation range of SD = 0.736–1.197 indicates moderate response variations among universities regarding funds allocation attributed to institutional size, governance structures, funding models and strategic orientation with older universities potentially investing more in research and intellectual property and newer institutions focusing on physical expansion and teaching facilities.

In summary, the findings suggest that there is an increasingly adoption of strategic and performance-driven approaches to resource allocation by Kenyan universities with funds being directed toward academic development, research, digitalization and commercialization, indicating a steady shift from input-based budgeting to strategic resource allocation. These results align with Halbheer et al. (2019**)**, who state that well-designed funding structures not only provide resources for strategic initiatives but also allow for reallocation in response to changing priorities.

4.5.6 Descriptive Results for University Performance

One of the measures for the dependent variable university performance, was student enrollment across Bachelor's, Master's and PhD programs between the academic years 2018/2019 and 2020/2021. Table 4.15 presents descriptive statistics results of the means and standard computed.

Table 4.15: Students Enrolment for University Academic Programs

Year	N	Mean Score	Std. Deviation
Bachelors Degree 18/19	43	4471.00	4469.273
Bachelors Degree 19/20	45	3560.49	4031.054
Bachelors Degree 20/21	45	3500.07	4544.188
Masters Degree 18/19	45	546.89	418.429
Masters Degree 19/20	44	593.30	475.922
Masters Degree 20/21	46	547.00	525.222
PhD 18/19	44	131.48	94.980
PhD 19/20	45	130.76	101.430
PhD 20/21	46	120.65	94.955

The results in Table 4.15 indicate a declining trend in undergraduate enrollment, with mean enrollments falling from 4,471 in 2018/2019 to 3,560 in 2019/2020 and further to 3,500 in

2020/2021. Doctoral enrollments also showed a modest decline, from 131 in 2018/2019 to 120 in 2020/2021. However, the Master's programs recorded a uniform pattern, increasing from 547 in 2018/2019 to 593 in 2019/2020 with a drop to 547 in 2020/2021 suggesting that undergraduate and PhD programs experienced a drop in student numbers, while Master's enrollments remained steady during the three academic years under study.

Bachelor's degree programs showed a steady decrease in mean enrollments although some institutions recorded higher maximum figures, implying that fewer students were enrolling per institution or per program over time. Master's programs demonstrated modest growth, indicating that there was a steady demand among professionals seeking career advancement, although the growth was not experienced into the 2020/2021 academic year. Doctoral programs remained the least enrolled, with low changes that suggesting a stable but small group of doctoral students across universities.

Notably, the standard deviation of some enrolment data for Bachelor's programs exceeded the mean, indicating high differences in student enrolment across universities. According to Field (2018), such variations indicate that the data points are widely spread and that the mean provides limited description of the central patter of distribution implying that student enrolment levels varied greatly among chartered universities in Kenya as a result of institutional size and market differences. As Kothari and Garg (2019) and Pallant (2020) observe, high differences may affect the accuracy of statistical estimates but does not invalidate the findings. The pattern further brings out the differences of the sampled universities, which was considered in interpreting the study results.

These findings align with Otieno (2017) and Nganga (2019) view that undergraduate enrollments have been affected by the rising competition from private universities and the phasing out of government-sponsored "parallel" Module II programs. The low numbers at the doctoral level point to challenges universities face related to limited faculty supervision, inadequate research funding and the high costs of postgraduate education (Gudo, et al., 2011; Ngome, 2019). While Master's programs attracted a steady number of working professionals, but financial crises attributed to the COVID-19 pandemic may have disrupted continuity in the 2020/2021 academic year.

In summary the decline experienced at undergraduate and doctoral levels can be as a result of cost related challenges, policy changes affecting government funding and weak research

infrastructure, however, the stability of Master's programs could be associated with continued demand from mid-career learners suggesting that there is need for universities to strengthen funding frameworks, research support and competitive program offerings to ensure steady enrollments and improve completion rates.

The study further examined student completion patterns between the academic years 2018/2019 and 2020/2021across Bachelor's, Master's and PhD programs. Descriptive statistics results for computed minimum, maximum, range, mean and standard deviation are presented in Table 4.16.

Table 4.16: Number of Students who Completed Studies within the Stipulated Study Period

Year	N	Minimum	Maximum	Range	Mean Score	Std. Deviation
Bachelors Degree 18/19	42	321	16000	15679	3467.88	3970.938
Bachelors Degree 19/20	44	300	17000	16700	2844.68	3807.483
Bachelors Degree 20/21	44	156	19000	18844	2888.05	4333.760
Masters Degree 18/19	39	20	1240	1220	374.79	330.299
Masters Degree 19/20	40	10	1182	1172	383.38	342.823
Masters Degree 20/21	42	18	1088	1070	308.57	287.880
PhD 18/19	39	0	3903	3903	265.15	858.607
PhD 19/20	42	0	430	430	78.67	80.167
PhD 20/21	43	3	448	445	72.12	80.994

The results in Table 4.16 indicate that the average number of undergraduate students completing their studies were steady at 3,468 in 2018/2019 but recorded a decline to 2,845 in 2019/2020, from 2,888 in 2020/2021. For Master's programs, the average number of graduates rose slightly from 375 in 2018/2019 to 383 in 2019/2020, but significantly declined to 309 in 2020/2021. Notably, at the doctoral level the average completions sharply dropped from 265 in 2018/2019 to 79 in 2019/2020 and further to 72 in 2020/2021 reflecting a consistent decline in completion rates across all academic levels during the three-year period.

At the undergraduate level, the observed decline in completions may be attributed to affordability challenges, policy shifts in government funding and increasing competition from private universities, which have disrupted traditional enrollment and retention structures

(Nganga, 2019; Otieno, 2017). At the Master's level, while demand for postgraduate education initially increased, the sharp decline in 2020/2021 coincides with disruptions caused by the COVID-19 pandemic, which affected teaching schedules, thesis supervision and availability of research funding (Oketch, 2020).

It was further observed that, the standard deviation for Bachelor's programs exceeded the mean, implying major differences across universities in the number of students completing their studies within the stipulated period. Field (2018) states, when the standard deviation is greater than the mean, the data is widely spread, indicating wide institutional differences implying that large variation may be attributed to disparities in program capacities, student support systems, or academic environments across universities. However, the means for Master's and PhD programs, were higher than the standard deviations, signifying lower variability and more similar completion patterns. This finding suggests that postgraduate programs are fairly stable with regular completion patterns across universities. The recorded differences among undergraduate programs reflects the differences in university performance considered in the study, which was appropriately addressed during data interpretation and analysis (Kothari & Garg, 2019; Mugenda & Mugenda, 2019; Pallant, 2020).

The most severe was recorded in PhD completions recorded the highest decline, which can be explained by widespread challenges not limited to inadequate research infrastructure, limited faculty supervision, high drop out rates and the high financial burden of doctoral education (Ngome, 2019; Ronoh & Chang'ach, 2025). Additionally, government policy shifts, including changes in university funding models and increased emphasis on self-sponsorship, have constrained doctoral studies in Kenya, limiting student progression and completion.

Notably, while universities continue to attract students at the Master's level due to demand for professional advancement, undergraduate and doctoral completions are declining indicating structural weaknesses in funding, supervision and retention mechanisms within Kenyan universities. To address these gaps, there is need for more effective student funding system, enhanced research funding and stronger academic support systems to sustain both enrollment and successful completion rates.

Further to student enrollment and completion rates, faculty recruitment patterns offer valuable understanding into institutional capacity and academic sustainability. The ability of universities to attract and retain qualified academic staff directly influences the quality of teaching, research

productivity and overall institutional performance. Table 4.17 presents the number of faculty recruited across chartered universities during the study period.

Table 4.17: Number of Faculty Recruited

Year	N	Minimum	Maximum	Range	Mean Score	Std. Deviation
Lecturers 18/19	32	1	71	70	15.41	14.199
Lecturers 19/20	43	1	73	72	13.26	12.515
Lecturers 20/21	42	0	72	72	13.74	14.320
Senior Lecturers 18/19	39	0	32	32	7.41	7.920
Senior Lecturers 19/20	43	0	31	31	6.21	6.753
Senior Lecturers 20/20	43	0	34	34	8.14	8.607
Professors 18/19	42	0	16	16	5.05	5.170
Professors 19/20	43	0	18	18	6.40	4.962
Professors 20/21	44	0	28	28	8.23	6.057

The results in Table 4.17 reveal variations in the recruitment of academic staff across universities in the three academic years from 2018/2019 to 2020/2021. The average number of Lecturers recruited declined from 15 in 2018/2019 to 13 in 2019/2020, before a small rise to 14 in 2020/2021. Recruitment for Senior Lecturers decreased from an average of seven in 2018/2019 to six in 2019/2020, then rose again to eight in 2020/2021. the number of Professors recruited also showed a steady rise from five in 2018/2019 to six in 2019/2020 and further to eight in 2020/2021. In general, these results reveal an overall increasing trend in the number of senior academic staff, while recruitment at the lecturer level remained more variable during the same period.

Fluctuations in academic staff recruitment can be attributed to a range of environmental and institutional factors within the higher education sector in Kenya including, variations in government funding and delays in capitation disbursement have sometimes limited universities' ability to hire new staff or replace those who exit (Mukhwana et al., 2016; Sifuna, 2019) resulting to universities halting or delaying recruitment, particularly at the lecturer level where most new appointments occur. Secondly, declining undergraduate student enrollment in as indicated in Table 4.15, has reduced the immediate demand for additional teaching staff in some faculties, further contributing to irregular hiring patterns.

The increase in recruitment of senior lecturers and professors may be attributed to institutional efforts to meet Commission for University Education (CUE) accreditation standards, which emphasize improved staff qualifications and ratios between senior and junior faculty. In order to strengthen research output and postgraduate supervision capacity, many universities have prioritized promoting existing staff or recruiting experienced academics to (Oketch, 2020; Ronoh & Chang'ach, 2025) which may also reflect internal promotions as institutions seek to retain qualified staff amid increasing competition from both local and international universities.

In addition, delays and temporary freezes in hiring may have been due to the COVID-19 pandemic in 2020 that disrupted normal recruitment cycles, as universities restructured budgets to accommodate online learning and health-related expenditures (CHE, 2021). The renewed recruitment efforts in 2021 were notably at senior levels where leadership in research and postgraduate training played a key role in helping institution stay resilient. In general, the fluctuations in faculty recruitment point out wider changes in the sector including changing student numbers, financial constraints, evolving quality assurance requirements and the adaptive strategies of universities to maintain competitiveness in teaching, research and innovation.

The observed recruitment trends further highlight the direct link between human capital and institutional performance. Periods of reduced recruitment are often accompanied by heavier teaching loads, reduced research output and lower completion rates, whereas renewed hiring particularly of senior academic staff tends to strengthen research supervision, program quality and overall university performance (Chacha & Kipkebut, 2024).

The study further examined the number of students who benefited from university scholarships across Bachelor's, Master's and PhD programs over three academic years (2018/2019–2020/2021). The objective was to assess trends in institutional financial support extended to students as part of performance indicators related to access and equity. The results are presented in Table 4.18.

Table 4.18: Number of Students on University Scholarships

Year	N	Minimum	Maximum	Range	Mean	Std. Deviation
Bachelors Degree 18/19	40	0	234	234	39.88	56.996
Bachelors Degree 19/20	41	0	223	223	51.66	61.329
Bachelors Degree 20/21	40	0	287	287	61.85	65.174
Masters Degree 18/19	44	0	44	44	15.30	14.756
Masters Degree 19/20	45	0	44	44	18.09	14.760
Masters Degree 20/21	45	0	55	55	22.53	17.461
PhD 18/19	40	0	20	20	6.30	6.362
PhD 19/20	42	0	24	24	8.12	7.259
PhD 20/21	42	0	23	23	9.02	7.946

The results in Table 4.18 indicate a gradual increase in the number of students benefiting from university scholarships across all academic levels between 2018/2019 and 2020/2021. For Bachelor's programs, the mean number of scholarship recipients rose steadily from 39.88 in 2018/2019 to 51.66 in 2019/2020 and further to 61.85 in 2020/2021. A similar upward trend is observed at the Master's level, where the mean increased from 15.30 in 2018/2019 to 18.09 in 2019/2020 and to 22.53 in 2020/2021. There was a steady increase for number of students benefiting from university scholarships for PhD programs which showed a rise from an average of 6.30 in 2018/2019 to 9.02 in 2020/2021.

The results indicate that there has been a gradual progress in enhancing access to scholarships and financial aid during the three-year period by universities in Kenya with the overall increase having been attributed to donor-funded research grants, the introduction of institutional support schemes and government initiatives to promote inclusivity in higher education (CUE, 2023; UNESCO, 2022). Further, the upward trend reflects universities' efforts to protect students from financial challenges and reduce dropouts, especially during the COVID-19 pandemic period, when household incomes and economic stability were adversely affected (Oketch, 2020).

However, the results also show that at the undergraduate level there were considerable variations, where the standard deviation exceeds the mean across all three years (2018/2019: Mean = 39.88, SD = 56.99; 2020/2021: Mean = 61.85, SD = 65.17). Field (2018) argues that a

higher standard deviation than the mean, shows high variation indicating variance in the number of scholarship beneficiaries across institutions implying that while some universities awarded numerous scholarships, others offered very few or none at all. These variations may be attributed to universities' institutional policies, donor partnerships financial endowments and scholarship awarded on the basis of merit (Kothari & Garg, 2019; Pallant, 2020).

The postgraduate programs had lower variation, with the mean exceeding the standard deviation reflective of a fairly stable and consistent allocation of scholarship across universities. This could be attributed to a structured postgraduate funding used across universities often tied to external sponsorships, research grants and teaching assistantships (Mugenda & Mugenda, 2019). The lower variation could also be linked to universities prioritizing financial support for postgraduate research by as part of their academic development agenda.

Generally, the findings show an uneven but positive advancement in distribution of scholarship across academic levels with the high variability at the undergraduate level laying emphasis on the need for impartial funding mechanisms are across universities that will facilitate fair access to financial aid across academic levels. The expansion of scholarship programs for undergraduate and doctoral programs could potentially increase student retention rates, academic equity and university performance.

Research publication across Bachelor's, Master's and PhD programs was examined as a measure of academic progression and institutional research performance in chartered universities in Kenya and the results are presented in Table 4.19.

Table 4.19: Number of Research Publications

Year	N	Minimum	Maximum	Range	Mean Score	Std. Deviation
Bachelors Degree 18/19	11	0	0	0	.00	.000
Bachelors Degree 19/20	15	0	1	1	.53	.516
Bachelors Degree 20/21	18	0	3	3	1.00	1.029
Masters Degree 18/19	40	0	178	178	48.65	55.179
Masters Degree 19/20	42	0	145	145	45.10	45.440
Masters Degree 20/21	42	0	139	139	51.90	43.125
PhD 18/19	43	0	91	91	17.12	20.777
PhD 19/20	43	0	95	95	20.21	17.787
PhD 20/21	43	0	97	97	26.51	18.523

Results in Table 4.19 indicate that there was minimal research output at the undergraduate level, with a mean of one publication recorded in the academic year 2020/2021, suggesting little contribution in research at the bachelor's level. This finding align with the expected pattern of minimal research activities at undergraduate level given that research is largely confined to course projects with no publication requirements.

There was a slight decrease in research publications for masters' programs from 48.65 in 2018/2019 to 45.10 in 2019/2020 and a marginal rise to 51.90 in the 2020/2021 academic year. The increase in the publication resulting from a resumption of postgraduate research activities attributed to research grants and improved postgraduate supervision. An increase in the mean number of PhD programs research publications from 17.12 in 2018/2019 to 20.21 in 2019/2020 and further to 26.51 in 2020/2021, demonstrates an improvement in institutional capacity for postgraduate research and innovation across universities.

Notably, the mean values for Master's and PhD programs were higher than the standard deviations this implied that there were moderate changes and stable research activities across universities. Field (2018) argues that when the standard deviation is lower than the mean, it implies that the data points are distributed moderately suggesting that the average value reasonably represents the mean. In this case there was consistent research outputs at postgraduate across institutions although the low means and standard deviations were observed at the undergraduate level reflect minimal research productivity with limited institutional

variance. As Kothari and Garg (2019) and Pallant (2020) point out, such little variation and low mean values suggests uniform underperformance across universities.

In Kenya, publishing and disseminating research plays a major role in academic promotion and career growth, where faculty promotions, tenure and recognition are dependent on publication records and scholarly impact (Ronoh & Chang'ach, 2025; Waswa & Katana, 2022a). The rising number of publications, therefore, reflects a positive move toward a results-focused academic culture in which lecturers and supervisors receive incentives to publish as part of their career advancement. According to Ronoh and Chang'ach (2025), universities that include research publication in performance appraisal systems experience higher faculty motivation and increased postgraduate supervision efficiency. This aligns with the observed growth in doctoral publication outputs in this study.

The results generally demonstrate that chartered universities in Kenya are slowly strengthening their postgraduate research activities thereby contributing to institutional reputation and innovation and also enhancement of academic career pathways for academic staff. However, the low undergraduate research output points out the need to include research and mentorship practices at earlier stages of university education to cultivate a sustainable research culture.

Additionally, research productivity, institutional collaborations play a pivotal role in driving knowledge exchange, capacity building and access to external resources while partnerships with local and international universities, research institutions and industry stakeholders support new ideas and expands academic opportunities. Results for the number of university collaborations established across chartered universities during the study period are presented in Table 4.20.

Table 4.20: Number of University Collaborations

Year	N	Minimum	Maximum	Range	Mean Score	Std. Deviation
Local 18/19	42	0	20	20	4.79	5.385
Local 19/20	42	0	23	23	5.60	6.263
Local 20/21	42	0	24	24	6.62	7.191
International 18/19	42	0	14	14	4.19	3.946
International 19/20	44	0	12	12	4.34	3.437
International 20/21	44	0	12	12	4.89	3.425

Results in Table 4.20 show a steady increase in the average number of collaborations across chartered universities in Kenya during the three-year period under review with local collaborations rising from a mean of 4.79 in the 2018/2019 academic year to 5.60 in 2019/2020 and further to 6.62 in 2020/2021. International collaborations also increased slightly from an average of 4.19 in 2018/2019 to 4.34 in 2019/2020 and 4.89 in 2020/2021. These findings suggest that Kenyan universities are consistently expanding their partnerships with other institutions, with more notable growth observed in local collaborations as compared with international collaborations.

The standard deviations (SD = 5.39–7.19) across the three academic years for local collaborations were either close or higher than the means, suggesting moderate to high variation in the number of collaborations among universities. Field (2018) argue that when the standard deviation is higher than the mean in an indication of high variation, meaning that some universities engaged in numerous institutional collaborations, others did not or had few collaborations. This is an indication that chartered universities have varied levels of institutional capacity, research funding and networking potential. The standard deviations (SD = 3.43–3.95) for international collaborations was lower than the means, suggesting a reasonable degree of uniformity in the number of international collaborations that engaged in across universities demonstrating that that there was a low but fairly equal number of international collaborations across universities (Kothari & Garg, 2019; Pallant, 2020).

The findings for local university collaborations show a gradual rise which could be attributed to the local industry-institutional collaborations and research networks amongst universities and other institutions in the coutry, while the limited growth in international collaborations

could be as a result of institutional and financial challenges limiting international collaborations. As Waswa and Katana (2022a) observe limited research funding, high travel costs and limited institutional independence are key barriers for sustainable international linkages for many Kenyan universities.

In summary, while the observed increase in both local and international collaborations shows growing institutional cooperation, the differences across local collaborations suggests that only a few universities have attained strong partnership networks and enhancement of both local and international collaborations remains essential for improving research output, faculty exchange, innovation and the overall competitiveness of Kenya's higher education sector.

4.6 Correlational Analysis

The study conducted a Pearson's product-moment correlation analysis to determine the magnitude, direction and significance of the relationship between Ansoff growth strategies, funding policy and performance. The results are shown in Table 4.21.

Table 4.21: Correlation Matrix for AGS, FGP, FAP and Performance

Variable		MP	PD	MD	DIVER	FGP	FAP	PER
MP	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	47						
PD	Pearson Correlation	-0.001	1					
	Sig. (2-tailed)'	0.993						
	N	47	47					
MD	Pearson Correlation	0.353*	-0.197	1				
	Sig. (2-tailed)	0.015	0.185					
	N	47	47	47				
DIVER	Pearson Correlation	-0.071	-0.151	0.312*	1			
	Sig. (2-tailed)	.634	0.311	0.033				
	N	47	47	47	47			
FGP	Pearson Correlation	.330*	-0.200	0.538**	-0.038	1		
	Sig. (2-tailed)	0.024	0.179	0.000	0.801			
	N	47	47	47	47	47		
FAP	Pearson Correlation	0.031	-0.188	0.596**	0.521**	0.354*	1	
	Sig. (2-tailed)	0.838	0.205	0.000	0.000	0.015		
	N	47	47	47	47	47	47	
PER	Pearson Correlation	0.356*	0.054	0.357*	-0.244	0.527**	0.235	1
	Sig. (2-tailed)	0.014	0.716	0.014	0.098	0.000	0.112	
	N	47	47	47	47	47	47	47

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

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

Key: **MP** – Market Penetration
PD – Product Development
MD – Market Development
DIVER – Diversification
FGP – Funds Generation Policy
FAP – Funds Allocation Policy
PER – University Performance

The results presented in Table 4.21 show that correlation coefficients (r) range from –0.244 to 0.596, demonstrating differences in the strength of association across study variables. According to Bryman and Cramer (2005a), a correlation coefficient of $r = 0$ indicates that two variables are unrelated; $r \leq 0.19$ denotes a very weak relationship; $0.20 \leq r \leq 0.39$ represents a weak relationship; $0.40 \leq r \leq 0.69$ indicates a moderate relationship; $0.70 \leq r \leq 0.89$ signifies a strong relationship; and $r \geq 0.90$ suggests a very strong relationship. These standards provide an understanding of the strength and direction of relationship among the study variables; Ansoff growth strategies, funding policies and university performance.

The correlation results of ($r = 0.356$, $p < 0.05$) show that market penetration that had a positive and statistically significant correlation with university performance, implying that universities enhanced their performance by implementing market penetration strategies through improved marketing tactics, competitive pricing and engagement in student retention initiatives. The results further show weak but significant correlation between market penetration strategy and market development ($r = 0.353$) and market penetration strategy and funds generation policy ($r = 0.330$) implying that financial resource mobilization and external reach is required for universities to expand within existing markets.

Product development (PD) results ($r = 0.054$, $p > 0.05$) indicate that PD had a positive but insignificant correlation with university performance implying that efforts towards product innovation which include the introduction of new academic programs or online courses may not directly improve performance.

Market development (MD) results ($r = 0.357$, $p < 0.05$) indicate that MD had a moderate and positive correlation with both university performance and funds generation policy ($r = 0.538$, $p < 0.01$) suggesting that university efforts towards reaching new student categories or expanding into new geographic boundaries have an association with stronger financial sustainability and institutional outcomes. The correlation between market development and funds allocation policy ($r = 0.596$, $p < 0.01$) was also moderate, indicating that expansion efforts are supported by effective resource distribution mechanisms within universities.

Diversification strategy (DIVER) results show that diversification strategy had a weak but positive and significant correlation with market development ($r = 0.312$, $p < 0.05$) and a moderate positive correlation with funds allocation policy ($r = 0.521$, $p < 0.01$) implying that universities that offer varied academic programs and engaged in income-generating activities had enhanced resource allocation.

Funds Generation Policy (FGP) results indicate a positive and significant correlation with market penetration (r = 0.330, p < 0.05), market development (r = 0.538, p < 0.01) and university performance (r = 0.527, p < 0.01) the weak to moderate correlation suggest the importance internal resource mobilization in enhancing institutional performance through consultancy services, partnerships and tuition revenue.

Correlation results of funds allocation policy (FAP) show a moderate positive correlation with market development (r = 0.596, p < 0.01), diversification (r = 0.521, p < 0.01) and funds generation policy (r = 0.354, p < 0.05) though the correlation between funds allocation policy and (r = 0.235, p > 0.05) and market penetration (r = 0.031, p > 0.05) were weak and statistically insignificant. This suggests that while financial allocation structures are integral to supporting strategic initiatives, they may not directly determine overall institutional performance outcomes.

Overall, university performance (PER) showed weak to moderate positive correlations with market penetration (r = 0.356), market development (r = 0.357) and funds generation policy (r = 0.527), all statistically significant at p < 0.05. These findings confirm that effective implementation of Ansoff growth strategies particularly market expansion and internal financial mobilization positively influence the performance of chartered universities in Kenya.

4.7 Test of Hypotheses

Having tested the assumptions of regression analysis, the study performed regression analysis to test the hypotheses of the study. Simple regression analysis was used to test Hypotheses One to Four, Multiple regression analysis was used to test Hypothesis Five and PROCESS Macro to test hypothesis Six.

4.7.1 Market Penetration Strategy and Performance of Chartered Universities

The first hypothesis of the study stated that market penetration strategy does not have significant effect on performance of chartered universities in Kenya. To test this hypothesis, a simple linear regression analysis was performed, with market penetration strategy as the independent variable and the performance of chartered universities as the dependent variable. The results of the analysis which includes the Model Summary, ANOVA and Regression Coefficients are presented in Table 4.22.

Table 4.22: Simple Linear Regression Results for the Effect of Market Penetration on University Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.356[a]	0.127	0.108	677.65712

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3008451.723	1	3008451.723	6.551	0.014[b]
	Residual	20664862.625	45	459219.169		
	Total	23673314.349	46			

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
(Constant)	-1949.340	982.693		-1.984	.053
Market Penetration Strategy	635.422	248.257	0.356	2.560	.014

a. Predictors: (Constant), Market Penetration Strategy

b. Dependent Variable: Performance of Chartered Universities

The results of the Model Summary in Table 4.22 show that market penetration strategy explained 12.7% of the variance in university performance ($R^2 = 0.127$). This implies that 87.3% of the variance in performance was explained by other factors not included in the model.

The ANOVA results show that the model is significant, this confirms that market penetration had a statistically significant effect on performance outcomes ($F = 6.551$, $p < 0.05$). Thus, Hypothesis H_{01}, which stated that market penetration strategy does not have a significant effect on university performance, was rejected, while the alternative hypothesis that market penetration strategy has a significant effect on university performance was accepted.

The results of the standardized beta coefficients show that market penetration strategy had a significant positive effect on university performance ($\beta = 0.356$, $t = 2.560$, $\rho < 0.05$) indicating that increased implementation of market penetration strategy through student engagement, increased marketing campaigns alongside alumni-based recommendations enhanced student

enrollment, student retention and institutional competitiveness among chartered universities in Kenya as modelled in equation 4.1.

These findings align with Wambua and Mberia (2023) and Peruta and Shields (2017), who state by implementing market penetration strategy, universities that stretch payment of fees and engaged in social media marketing enhanced institutional visibility and student enrollment rates. Salmi and Bassett (2021) also states that strategic engagement within universities existing markets is a risk free and effective approach to improving university performance.

$$Y = -1949.340 + 635.422x_1 + 677.65712 \quad \text{..... (4.1)}$$

Where:

Y = University performance

x_1 = Market penetration strategy

4.7.2 Product Development Strategy and Performance of Chartered Universities

Hypothesis two assumed that product development strategy had no significant effect on the performance of chartered universities in Kenya and the hypothesis was tested using a simple linear regression analysis. Table 4.23 presents the Model Summary, ANOVA and Regression Coefficients results.

Table 4.23: Simple Linear Regression Results for the Effect of Product Development on University Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.054[a]	0.003	-0.019	724.23356

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	70173.369	1	70173.369	.134	.716[b]
	Residual	23603140.979	45	524514.244		
	Total	23673314.349	46			

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	63.423	1343.035		0.047	0.963
Product Development Strategy	112.131	306.563	0.054	0.366	0.716

a. Predictors: (Constant), Product Development Strategy

b. Dependent Variable: Performance of Chartered Universities

The results in table 4.23 show the Model Summary indicating that product development strategy explains 0.3% of the variation in university performance ($R^2 = 0.003$) implying that that 99.7% of the variation in university performance is explained by other factors not included in this model. On the other hand, the ANOVA results ($F = 0.134$, $p > 0.05$**)** indicate that product development strategy did not significantly predict performance outcomes of chartered universities in Kenya, therefore, Hypothesis Two, which stated that product development strategy does not have significant effect on university performance, was accepted.

The standardized Beta coefficients results show that product development strategy was not a significant predictor of performance in universities ($\beta = 0.054$, $t = 0.366$, $p = 0.716$) implying that product development strategy did not have a significant effect on performance of chartered universities in Kenya suggesting that universities engaging in curriculum innovation and program diversification initiatives alone does not necessarily translate into improved

institutional outcomes. Marginson (2020b) and Orr et al. (2020) also note universities may experience a delay in witnessing performance outcomes relating to the alignment of product innovation with market needs, adequate funding and stakeholder collaboration implying that relating to development of new academic programs, curricula review and adoption of digital learning technologies may not translate to immediate improvements in university performance. Factors relating to the misalignment of new academic programs and market demand and limited resources required for the implementation of innovations could lead to long gestation periods for the realization of benefits of product development strategy.

The findings align with views by Orr et al. (2020) and Marginson (2020b), who state that the impact of product innovation on performance higher education institutions is determined by effective implementation of product development strategy, market responsiveness and emphasis in quality assurance. Ng'ang'a and Wambugu (2022) also state that the effectiveness of product development strategies in Kenyan universities is undermined by limited funding and inadequate infrastructure necessary for running new academic programs suggesting that launching of new academic programs and incorporating digital learning platforms alone do not guarantee improved performance. Kinyua and Mungai (2021) further argue that misalignment of product development strategy with market demand and inadequate financial resources, limit universities ability to witness immediate performance outcomes as a result of implementing product development.

4.7.3 Market Development Strategy and Performance of Chartered Universities

Hypothesis three assumed that market development strategy had no significant effect on the performance of chartered universities in Kenya and was tested using a simple regression analysis and the results are presented in Table 4.24.

Table 4.24: Simple Linear Regression Results for the Effect of Market Development on University Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.357[a]	0.127	0.108	677.50292

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3017855.020	1	3017855.020	6.575	.014[b]
	Residual	20655459.328	45	459010.207		
	Total	23673314.349	46			

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	-1146.073	670.018		-1.711	0.094
Market Development Strategy	448.753	175.013	0.357	2.564	0.014

a. Predictors: (Constant), Market Development Strategy

b. Dependent Variable: Performance of Chartered Universities

The results of the Model Summary in Table 4.24 show that market development strategy accounted for 12.7% of the variance in university performance ($R^2 = 0.127$) implying that 87.3% of the variance in university performance was explained for by other factors not included in the study model.

The ANOVA results ($F = 6.525$, $p < 0.05$) confirmed that the model was statistically significant therefore, Hypothesis H_{03}, which stated that market development strategy does not have significant effect on university performance, was rejected and the alternative hypothesis that market development strategy has a significant effect on university performance was accepted.

The results of the standardized beta coefficients further demonstrated that market development strategy had a positive and statistically significant effect on university performance ($\beta = 0.357$, $t = 2.564$, $\rho < 0.05$) implying that universities are likely to enhance institutional growth,

improve institutional visibility and competitiveness by implementing market development through offering cross-border education, launching online programs aimed at reaching new learner segments.

These findings further suggest that by varying student enrolment tactics, establishing collaborations across borders and introducing flexible modes of learning that align with market needs, universities are bound to enhance performance outcomes. This results align with the Ansoff Growth Model, which states that expansion into new markets enhances growth by increasing institutional reach and revenue streams (Ansoff & McDonnell, 1990).

Altbach and de Wit (2018) state that through offering online programs into international markets and engaging in international partnerships and universities improve performance and the university visibility and competitiveness is enhanced. Johnson, Scholes and Whittington (2017) also emphasize the need for universities to expand markets through digital and global outreach as a way of enhancing resource utilization, increasing student enrollment and enhancing overall university performance. The effect of market development strategy on performance of chartered universities in Kenya is illustrated Equation 4.2;

These results support the argument by Taip et al. (2023) that universities expanding their reach through innovative delivery models and cross-border engagements tend to enhance both financial sustainability and global competitiveness.

$$Y = -1146.073 + 448.753x_2 + 677.50292 \quad \text{..... (4.2)}$$

Where:

Y = University performance.

x_2 = Market development strategy.

4.7.4 Diversification Strategy and Performance of Chartered Universities

The fourth hypothesis of the study stated that diversification strategy does not have a significant effect on the performance of chartered universities in Kenya was tested using simple linear regression analysis. In this analysis, performance of chartered universities was regressed on diversification strategy. The results of this regression analysis, including the Model Summary, ANOVA and Regression Coefficients, are presented in Table 4.25.

Table 4.25: Simple Linear Regression Results for the Effect of Diversification on University Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.244[a]	0.060	0.039	703.38413

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1409598.781	1	1409598.781	2.849	.098[b]
	Residual	22263715.568	45	494749.235		
	Total	23673314.349	46			

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
(Constant)	2177.617	967.859		2.250	.029
Diversification Strategy	-405.550	240.264	-.244	-1.688	.098

a. Predictors: (Constant), Diversification Strategy

b. Dependent Variable: Performance of Chartered Universities

The results of the Model Summary in Table 4.25 show that diversification strategy explained 6.0% of the variance in university performance ($R^2 = 0.060$). This implies that 94.0% of the variation in university performance was explained by other factors not included in the model.

The ANOVA results ($F = 2.849$, $p > 0.05$) showed that the model was statistically insignificant as a result Hypothesis Four (H_{04}), which stated that diversification strategy does not have significant effect on university performance, was not rejected, indicating that diversification initiatives did not significantly have an effect on university performance.

As reflected in the standardized beta coefficients diversification strategy was not a significant determinant of university performance ($\beta = –0.244$, $t = –1.688$, $\rho > 0.05$) implying that the diversification strategies implemented by universities did not have a considerable effect on performance outcomes suggesting that the effectiveness of diversification strategy is dependent on the ability of universities aligning strategies with institutional mission, capacity and

resources availability. Implementation of commercial enterprises by universities without clear linkage with market analysis may fail to yield corresponding performance gains.

The findings of this study align with the Dynamic Capabilities Framework by Teece, Pisano and Shuen (1997), which states that organizational performance gains are linked to an institution's ability to exploit its internal competencies to respond to environmental changes. Goddard et al. (2019) state that diversification into unrelated commercial activities in the higher education potentially stretches universities limited resources, weakens academic focus and dilutes institutional identity. Salmi and Bassett (2021) also argue that implementing unrelated diversification may result to operational inefficiencies and reduced strategic fit resulting in universities inability to record considerable performance improvements.

This finding resonates with Kariuki et al. (2021), who reported that diversification strategies in public universities in Kenya often suffer from weak institutional structures and lack of commercial orientation, limiting their contribution to measurable performance outcomes.

4.7.5 Joint Ansoff Growth Strategies on the Performance of Chartered Universities

Hypothesis five stated that joint Ansoff growth strategies jointly do not have a significant effect on the performance of chartered universities in Kenya was tested. To test this hypothesis, a multiple regression analysis was conducted. University performance was regressed on joint Ansoff growth strategies that is, MP, PD, MD and DIVER. The results of the analysis are presented in Table 4.26.

Table 4.26: Multiple Linear Regression Results for the Effect of Joint Ansoff Growth Strategies and University Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.552[a]	0.304	0.238	626.13232

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7207563.830	4	1801890.958	4.596	.004[b]
	Residual	16465750.519	42	392041.679		
	Total	23673314.349	46			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1165.937	1855.736		-0.628	0.533
	Market Penetration	328.878	250.808	0.185	1.311	0.197
	Product Development	173.495	272.014	0.084	0.638	0.527
	Market Development	524.661	188.089	0.417	2.789	0.008
	Diversification	-579.313	230.780	-0.349	-2.510	0.016

a. Predictors: (Constant), Market Penetration, Product Development, Market Development, Diversification

a. Dependent Variable: Performance of Chartered Universities in Kenya

The results of the Model Summary in Table 4.26 show that the joint Ansoff Growth Strategies comprising market penetration, product development, market development and diversification explained 30.4% of the variance in university performance ($R^2 = 0.304$). This implies that 69.6% of the variation in university performance was influenced by other factors not captured in this model.

The ANOVA results indicate that the model was statistically significant ($F = 4.596$, $p < 0.05$), indicating that market penetration, product development, market development and diversification strategies jointly have a statistically significant effect on university

performance. Thus, Hypothesis H_{05}, which stated that Ansoff growth strategies jointly do not have significant effect on university performance, was rejected, while the alternative hypothesis was accepted. This demonstrates that AGS jointly have a significant on university performance.

The standardized beta coefficients reveal the effect of each individual strategy within the model varied with market development strategy having a positive and statistically significant effect on performance ($\beta = 0.417$, $t = 2.789$, $p < 0.05$). This implies that universities had an improved performance as a result of introducing online education, expanding into international markets tapping into underserved regions.

Diversification strategy on the contrary had a significant but negative effect on university performance ($\beta = –0.349$, $t = –2.510$, $p < 0.05$), suggesting that universities strain the limited institutional resources by engaging in commercial ventures which negatively impact on the overall performance. On the other hand, market penetration ($\beta = 0.185$, $t = 1.311$, $p > 0.05$) and product development ($\beta = 0.084$, $t = 0.638$, $p > 0.05$) both had positive but insignificant effects implying that universities efforts towards gaining market share within existing markets and launch of new programs have no substantial effect performance and require to be supported by effective funding mechanisms and extensive strategic actions. Salmi and Bassett (2021) and Orr et al. (2020**)** state that in order to enhance performance, universities should complement the implementation of diversification strategy with intensive marketing and use of technology. The findings reveal that university performance is enhanced when Ansoff Growth Strategies are jointly implemented with market development strategy emerging the most influential driver among all the Ansoff growth strategies underscoring the importance of integrating growth strategies to achieve sustainable institutional outcomes.

These results align with Johnson et al. (2017) and Altbach and de Wit (2018), who state that implementation of growth strategies boosts income generation streams, enhances student enrolment by targeting new student markets and enables universities to adapt to globalization. The findings also align with the Dynamic Capabilities Theory (Teece et al., 1997), which posits that successful diversification depends on the organization's ability to reconfigure internal capabilities to match new opportunities. Poorly aligned diversification, therefore, undermines institutional focus and efficiency (Goddard et al., 2019).

Model 4.3 was therefore formulated to interpret this relationship.

$$Y = -11465.937 + 328.878x_1 + 173.495x_2 + 524.661x_3 - 579.313x_4 + 626.13232 \ldots. (4.3)$$

4.7.6 Moderating Effect Funding Policy

The study used Process Macro by Hayes 2022 to test hypothesis six which stated that funding policy does not have significant effect on the relationship between Ansoff growth strategies and performance of chartered universities in Kenya. Table 4.27 shows the results of the process macro.

Table 4.27: Process Macro for the Moderating Effect of Funding Policy

```
Model  : 1
    Y  : Performance of Chartered Universities in Kenya
    X  : Ansoff Growth Strategies
    W  : Funding POLICY

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7384      .5452 250393.520    17.1815     3.0000    43.0000      .0000

Model
                  coeff         se          t          p       LLCI       ULCI
    constant 38804.1372  8263.7417     4.6957     .0000 22138.5273 55469.7471
     Ansoff  -10953.741  2197.6436    -4.9843     .0000 -15385.761 -6521.7206
    FPOLICY  -9820.2061  2032.2977    -4.8321     .0000 -13918.771 -5721.6414
    Int_1     2793.6276   534.0601     5.2309     .0000  1716.5807  3870.6746

Product terms key:
 Int_1    :        Ansoff  x        FPOLICY

Test(s) of highest order unconditional interaction(s):
                       R2-chng          F        df1        df2          p
                X*W      .2894    27.3626     1.0000    43.0000      .0000
----------
    Focal predict: Ansoff  (X)
          Mod var: FPOLICY  (W)

Conditional effects of the Ansoff Growth Strategies at values of the
moderator(s):
     FPOLICY     Effect         se          t          p       LLCI       ULCI
      3.6311  -809.6777   375.3560    -2.1571     .0366 -1566.6636   -52.6917
      3.9974   213.4814   292.4793     .7299     .4694  -376.3660   803.3289
      4.3636  1236.6406   326.6704     3.7856     .0005   577.8396  1895.4415
```

The results of the Model Summary in Table 4.27 show that the model incorporating both Ansoff Growth Strategies and funding policy explained 54.52% of the variance in university performance ($R^2 = 0.5452$). This indicates that the joint effect of Ansoff growth strategies and funding policy accounts for over 50% of the variability in university performance, demonstrating that the model has strong explanatory power.

The regression coefficients reveal that both Ansoff growth strategies ($\beta = -10{,}953.74$, $t = -4.98$, $p < 0.05$) and Funding Policy ($\beta = -9{,}820.21$, $t = -4.83$, $p < 0.05$) individually exhibited statistically significant but negative effects on university performance suggesting that when Ansoff growth strategies of funding policy are implemented in isolation the performance outcomes declines. Oketch, 2020 and Ronoh & Chang'ach, 2025 argue that the decline in performance acould be attributed to strategy implementation inefficiencies and lack of proper resource allocation. The introduction of the interaction term between Ansoff Growth Strategies and Funding Policy into the regression model explained that there was an increase ($\Delta R^2 = 0.2894$) in the variation in performance by 28.94% and the significance of the model ($F = 27.36$, $p < 0.05$). The interaction term was also statistically significant ($\beta = 2{,}793.63$, $t = 5.23$, $p < 0.05$) implying that funding policy significantly strengthens the relationship between Ansoff growth strategies and university performance.

This result means that the effect of growth strategies on university performance differs depending on the funding policies in place implying that with clear policies on funds generation, allocation and utilization universities are better able to support the implementation of growth strategies for enhanced performance. On the other hand, Kamau and Wambugu, 2022; Musyoka et al., 2023, argue that universities with a weak funding policies may not effectively implement growth strategies and may fail to achieve optimal performance outcomes.

The findings supported the rejection of the null hypothesis (H_{06}), confirming that funding policy significantly moderates the relationship between Ansoff growth strategies and university performance underscoring the importance of financial resources and policy alignment in effective strategy implementation in universities. These results also align with the Resource-Based View (RBV) and the Dynamic Capabilities Theory, which state that availability and reorganization of the available resources to support organizational strategic choices are key determinants of organizational performance (Barney, 1991; Teece et al., 1997) implying that with sound funding policy universities are able to implement growth strategies translating to enhanced performance outcomes.

Therefore, this study revealed that the generation and allocation of funds strengthened the relationship between Ansoff growth strategies and performance of chartered universities in Kenya implying that funding enable the implementation of growth strategies yield improved performance. Funding policy has been seen to enhance growth and diversification strategies

leading to improved performance of organization. The coefficients for the moderation model specified as $Y = \beta_0 + \beta_1 X + \beta_2 M + \beta_3 (XxM) + \mathcal{E}$ which examined the moderating effect of funding policy, are presented in Model 4.4.

$$Y = 38804.1372 - 10953.741\bar{x} \quad - 9820.2061\bar{z} + 2793.6276xz + 500.39337 \ldots\ldots (4.4)$$

Where:

$\bar{x}$ = Ansoff growth strategies (composite of x_1 = market penetration; x_2 = product development; x_3 = market development and x_4 = diversification)

$\bar{z}$ = funding policy (composite of z_1 = funding generation policy and z_2 = funding allocation policy)

xz = product of AGS and funding policy

The study further revealed conditional effects of the Ansoff growth strategies at one standard deviation to the left and one standard deviation to the right. At the three points, that is, at the mean (3.99), one standard deviation to the left (3.6311) and one standard deviation to the right (4.3636), the study found that the moderation effect was significant with p-values less than 0.05. The conditional effect of the Joint Ansoff growth strategies was plotted across the various points of the moderator variable and results shown in Figure 4.1.

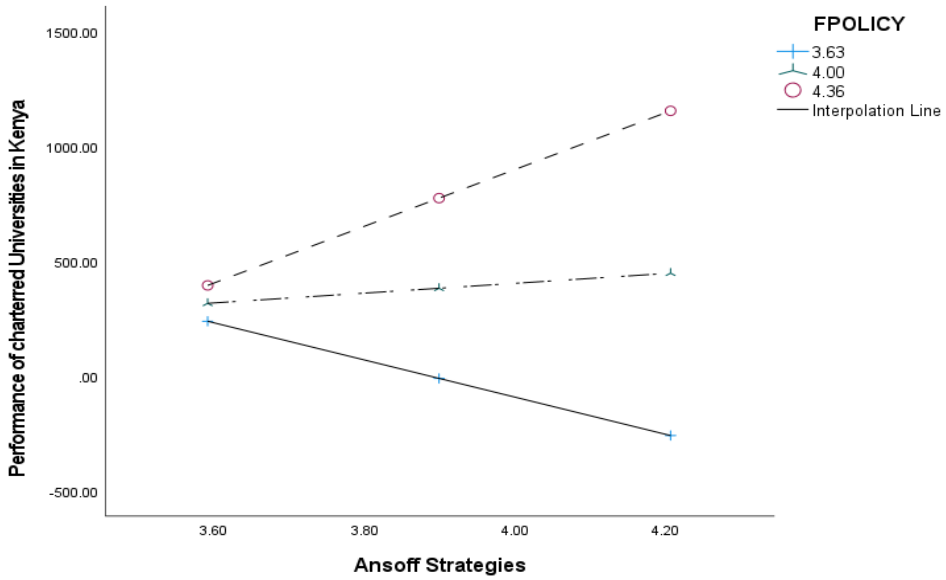

Figure 4.1: Conditional Effect of The Joint Ansoff Growth Strategies

Further analysis of conditional effects across three levels of the moderator variable at the mean ($\mu = 3.99$), one standard deviation below ($\sigma < 3.63$) and one standard deviation above ($\sigma > 4.36$) demonstrated that the moderation effect remained statistically significant ($p < 0.05$) at all levels. This implies that an institution's funding policy determines how its financial resources are generated and allocated towards the implementation of its strategic choices. Specifically, the effect of Ansoff growth strategies on performance is either strengthened or weakened depending on the structure and implementation of the funding policy.

4.7.7 Summary of Results of Hypotheses Testing

The study tested six hypotheses to examine the effect of Ansoff growth strategies and funding policies on the performance of chartered universities in Kenya. The summary of the results of these hypotheses tests is presented in Table 4.28.

Table 4.28: Summary of the Results of the Tests of Hypotheses

Hypothesis		Results	Conclusion
$H_0$1:	Market penetration strategy has no significant effect on performance of chartered universities in Kenya.	Positive and significant effect of market penetration on university performance (β = 0.356, t = 2.560, $p < 0.05$).	Rejected
$H_0$2:	Product development strategy has no significant effect on performance of chartered universities in Kenya.	Negative and insignificant effect of product development on university performance (β = 0.054, t = 0.366, $p > 0.05$).	Failed to reject
$H_0$3:	Market development strategy has no significant effect on performance of chartered universities in Kenya.	Positive and significant effect of market development on university performance (β = 0.357, t = 2.564, $p < 0.05$).	Rejected
$H_0$4:	Diversification strategy has no significant effect on performance of chartered universities in Kenya.	Positive and insignificant effect of diversification on university performance (β = -.244, t = -1.688, $p > 0.05$).	Failed to reject
$H_0$5:	Ansoff growth strategies jointly have no significant effect on performance of chartered universities in Kenya.	Positive and significant effect of joint Ansoff growth strategies on university performance, (F = 4.596, $p < 0.05$)	Rejected
$H_0$6:	Funding policy has no significant moderating effect on the relationship between Ansoff growth strategies and performance of chartered universities in Kenya.	Interaction term has a positive and significant effect on performance (β = 2793.63, t = 5.23, $p < 0.05$); change in R^2 is significant (ΔR^2 = 0.2894, F = 27.36, $p < 0.05$)	Rejected

The summary of findings in Table 4.28 indicate that market penetration strategy ($H_0$1) and market development strategy ($H_0$3) both have a statistically significant positive effect on

university performance, as evidenced by positive beta coefficients and p-values less than 0.05. Similarly, the joint application of Ansoff growth strategies ($H_0$5) was also found to have a significant positive effect on performance. Consequently, the null hypotheses for $H_0$1, $H_0$3 and $H_0$5 were rejected.

Conversely, product development strategy ($H_0$2) and diversification strategy ($H_0$4) did not exhibit statistically significant effects on university performance ($p > 0.05$), despite product development showing a small positive beta and diversification showing a negative beta resulting to the inability to reject the null hypotheses $H_0$2 and $H_0$4 which means that implementation of Ansoff growth strategies, in isolation may not enhance performance.

The study hypothesis six $H_0$6 which stated that funding policy does not have a significant moderating effect on the relationship between Ansoff growth strategies and university performance was tested the results revealed that funding policy had a significant positive moderating effect on university performance with R^2 (0.2894) and F-statistic ($F = 27.3626$, $p<0.05$), leading to rejection of the null hypothesis for $H_0$6 attributing the improved performance to funding policies. Table 4.28 shows that although some Ansoff growth strategies on their own have no effect on university performance, when universities implement Ansoff growth strategies jointly supported by sound funding policies there is a marked improvement in the performance of chartered universities in Kenya.

CHAPTER FIVE
DISCUSSIONS

5.1 Introduction

In accordance with the study objectives, this section discusses the study's findings, reviewing how they converge and diverge with previous research.

5.2 Market Penetration and University Performance

Objective one sought to examine the effect of market penetration strategy on the performance of chartered universities in Kenya and tested the hypothesis which stated that market penetration strategy had no significant effect on the performance of chartered universities in Kenya. The simple regression analysis results show that market penetration strategy statistically significantly ($\beta = 0.356$, $t = 2.560$, $p = 0.014$) predicts the performance of chartered universities in Kenya, leading to the rejection of the null hypothesis (H_{01}) implying that implementation of market penetration strategy contributes meaningfully to the improved performance of chartered universities in Kenya.

These findings align with Shisia and Wanjere (2019) who found that focus strategies which are closely relate to market penetration strategy, positively influenced performance among public universities in Nairobi County. Kuria and Waiganjo (2016) also state that intensive marketing and an institution having a variety of course offerings significantly improved institutional competitiveness at the University of Nairobi. Sande and Waweru (2020) also argue that implementation of market penetration strategies led to improved student enrollment, enhanced institution reputation and ensured financial sustainability among Kenyan public universities supporting the conclusion that market penetration strategy is key in enhancing university performance.

The findings of this study align with the views of Porter and Ketels (2018) and Martínez and Fernández (2021) also confirm that market penetration strategies has a positive relationship = with performance across different sectors and further state that universities engaging in digital marketing and targeted student enrolment universities are able in increase student enrolment numbers and boost their revenue streams.

However, although this finding align with previous literature indicating that market penetration strategy has a significant effect on university performance, the magnitude of the effect is relatively modest (β=0.356), suggesting that market penetration strategy may not be the

overriding strategic factor that enhances university performance. This could be attributed to the unique operational challenges faced by chartered universities in Kenya which may include challenges relating to market saturation, limited funding, infrastructural limitations restricting effective implementation of market penetration strategies.

Notably results of this study differ with earlier studies that found significant improvement in performance as a result of implementation of market penetration strategies, this study indicates a moderate effect attributed to varying institutional capacities to support strategy implementation. In addition, some earlier research conducted in the Europe established that market penetration strategy had an effect on outcomes such as university rankings and institution visibility performance measures that were not used in this study.

From the Resource-Based Theory (RBT), perspective the study findings can explain the importance of making the most of the internal institutional resources to effectively implement market penetration strategies. RBT argues that a firm is able to gain competitive advantage by using its internal unique resources that are valuable, rare, inimitable and non-substitutable (VRIN) (Barney, 1991; Wernerfelt, 1984) suggesting that difference in performance of chartered universities that adopt similar market penetration strategies, may be attributed to an institution's ability to optimally utilize its unique internal assets such as faculty quality, digital capabilities and alumni networks.

Moreover, the relatively modest effect size may reflect disparities in the quality of implementation. According to Barney and Hesterly (2015), even when institutions adopt similar strategies, competitive advantage is contingent on how well those strategies are executed using the institution's unique resource endowment. A university with strong digital infrastructure may be more successful in penetrating new market segments than one lacking such capabilities. RBT further emphasises the need for aligning institutional unique resources with the organizational processes and culture for sustained organizational performance as such, universities that implement market penetration tactics without consideration of the organizational culture and processes undermine the strategic potential of market penetration strategies. This explains why previous studies recorded a stronger association between market penetration strategies and universities performance as compared to this study for institutions that are resource-rich.

In line with both prior findings from previous studies and theoretical expectations from the Resource-Based Theory this study's findings affirm the importance of implementing market penetration strategies to enhance university performance, however, the moderate effect recorded between market penetration strategy and university performance (β = 0.356) is an indication that successful implementation depends the institution's ability to match market penetration strategy with the institution's internal capabilities underscoring the importance of universities not only adopting market-oriented strategies but also emphasizing the need for aligning the universities' unique resource base with the strategy so as to maximize competitiveness and institutional sustainability.

In summary, the findings of this study largely align with previous findings and also bring out industry specific limitations that may strengthen the effect of implementation of market penetration strategies to enhance performance in Kenyan universities underscoring the importance of matching institutional strategic approaches to institutional resources and continuously evaluating their effectiveness within changing higher education environments.

5.3 Product Development and University Performance

Objective two of the study sought to determine the effect of product development strategy on the performance of chartered universities in Kenya and the corresponding hypothesis stating that product development strategy had no significant effect on the performance of chartered universities in Kenya. Using a simple linear regression analysis, the hypothesis was tested and established that product development strategy did not have a statistically significant effect on performance of chartered universities (β = 0.054, t = 0.366, p = 0.716) and with ($p > 0.05$), the null hypothesis was not rejected, indicating that product development strategy has no effect on university performance of chartered universities in Kenya.

This study findings differ with several prior studies that reported a significant positive association between product development strategy and institutional performance in higher education. Sande (2019) established that public universities in Kenya enhanced their competitiveness by introducing innovative academic programs that align with needs of the labour, while Kibuine et al. (2022) revealed that the institutions that adopted structured stage-gate framework, recorded measurable improvements in institutional performance. Ndichu (2014) also established that private chartered universities that implemented product

diversification initiatives had a marked improvement on their performance and institutional growth.

The differences of this study findings with the previous studies may be as a result of the different research methodologies used and the nature of the university differences particularly between public and private universities which are critical in strategy implementation of product development initiatives. Previous studies have shown that private institutions have a greater agility and responsiveness in adapting academic offerings to market changes as compared to public universities, which face more rigid regulatory frameworks (Kiptoo & Mwirigi, 2021).

The delay in the effect of product development outcomes also explains the lack of a significant relationship as noted by Obonyo and Gakure (2015), that the benefits of strategic innovations in academic programs may only evident after lengthy periods, however, if performance is measured in the short term, the delayed effects of curriculum innovation, accreditation processes, or student enrolment may not be evident. Implementation quality and resource availability is another critical determinant of the difference in effect of product development as universities may initiate new programs without adequate market research, stakeholder engagement, or infrastructure, resulting in underperformance (Mwangi & Kihoro, 2020). The implementation of new offerings without proper alignment to institutional goals, student needs and labour market trends is insufficient to register improvement in university performance. Market saturation and competition within the higher education section also reduces the effectiveness of product development on performance particularly where many institutions introduce similar programs without differentiation (Waswa & Katana, 2022b).

Notwithstanding the contrasting findings, the results of this study can be meaningfully interpreted through the lens of the Resource-Based Theory (RBT) that organizational performance is not only driven by the adoption of generic strategies, but by how well these strategies maximize the exploitation of the institution's unique internal resources and capabilities (Barney, 1991). As such the ineffectiveness of product development observed in this study may suggest a lack of strategic fit between the strategy and the institution's internal resource base as many universities may launch new academic programs without the necessary intellectual capital, infrastructure, or organizational culture to support them, limiting their effect on performance (Mwangi & Kihoro, 2020).

RBT further emphasizes that for institutional resources to provide sustained competitive advantage, should be valuable, rare, inimitable and non-substitutable (Barney, 1991), however, there is a possibility that product development efforts across chartered universities in Kenya are neither sufficiently unique nor have distinctive competencies. The development of similar programs in response to the same perceived market trends by universities may be diluted and fail to offer strategic value of such offerings, leading to insignificant performance gains (Waswa & Katana, 2022b). Kiptoo and Mwirigi (2021) further argue that, private universities often possess more flexible governance structures and better resource mobilization capacity enabling them to respond more effectively to market needs as compared to public universities that are constrained by regulatory rigidity and resource limitations and struggle to implement new offerings in a way that generates value.

Prior research has identified product development strategy as a driver of institutional performance while this study's findings suggest that the effect of product development strategy is not positive. Using the RBV theory, lack of significant results underscores the importance of aligning product development strategies with institutional capabilities to ensure that such initiatives are driven by unique, high-value resources rather than a reactive planning that imitates strategies implemented by other universities, reinforcing the view that competitive advantage in higher education is not merely about what is done, but how well it is done and with what internal strengths it is executed.

Using the Strategic Fit Theory, the results of this study suggest that the success of product development strategies is depends upon the fit between an institution's internal capacities and the external market environment (Venkatraman & Camillus, 1984). The Strategic Fit Theory argues that optimal performance is achieved when there is an alignment between organizational resources, capabilities and the demands of the operating environment and the lack of significant effect is as a result of the mismatch between strategy and institutional capacity. This explains why public universities, often faced with bureaucratic rigidity, limited autonomy and constrained resources are unable to effectively implementation of new academic programs (Kiptoo & Mwirigi, 2021) as compared to private universities that are more agile and market-responsive. The time-lag effect may also account for the absence of observable outcomes as Obonyo and Gakure (2015) observes that the benefits of new academic programs such as improved student enrollment, institutional partnerships and reputational gains may take years to be evident, especially when performance is measured in the short term.

As Mwangi and Kihoro (2020) argue, the implementation quality of product development initiatives is another critical factor in determining the effectiveness of the strategy on performance and the introduction of new academic offerings is insufficient unless supported by thorough market research, stakeholder engagement and adequate infrastructure. Misalignment of the programs with labour market demands is unlikely to attract students or enhance institutional performance and market saturation may also dilute the effectiveness of product development and as Waswa and Katana (2022b) notes, in an increasingly competitive higher education sector, institutions that fail to differentiate their offerings may not gain a significant competitive advantage.

In aligning the study findings with the Strategic Fit Theory, the findings underscore the importance of strategic coherence, meaning, product development strategies should not be pursued in isolation but rather combined with institutional strengths, available resources and the broader educational environment without which such alignment, even with well-intentioned innovations may fail to produce the expected performance gains in chartered universities.

Although previous research established the strategic value of product development on performance of universities, the findings of this study suggest important contingencies and limitations that determine successful implementation which include institutional type, time horizon for realization of the expected outcomes, implementation capacity and external market factors. Future research should adopt a longitudinal research design and categorize universities based on the type and resource base to better understand the conditions under which implementation of product development strategies contributes to improved performance.

5.4 Market Development and University Performance

This study findings are generally consistent with previous research emphasizing the importance of market development strategy in enhancing institutional performance as Mwangi and Wanjiru (2021) established that through expanding into new geographic markets and targeting untapped student populations universities in Kenya record improved student enrollment and financial sustainability. Kimani et al. (2022) also reported that universities that implemented strategies such as opening regional campuses and enrolled international students had a positive impact on institutional growth and competitiveness. In addition, this study's findings further align with Njoroge and Otieno (2022), who established that universities that engaged in aggressive

internationalization activities, implemented digital learning and adopted flexible teaching models achieved enhanced institutional reputation, financial performance and student retention reinforcing the conclusion that market development is a significant predictor of university performance.

However, the moderate strength observed on the effect of market development strategy on performance of universities in Kenya, brings out the contextual limitations within the Kenyan higher education environment implying that as universities adopt regional expansion, international student enrolment and online delivery modes of teaching as key growth strategies, the success of these initiatives depends heavily on institutional capacity, infrastructure and managerial competence, therefore, institutions with limited resources or weak operational frameworks may not realize fully the benefits of market development.

Market saturation provides another probable explanation for effective market development strategies, in that as many chartered universities in Kenya target similar geographic and demographic segments, competition is intensified diluting market gains and when multiple institutions compete within overlapping territories, the potential advantage of expansion diminishes, particularly when supporting strategies such as product differentiation or quality enhancement are lacking.

The results of this study also align with Mugambi et al. (2023) and Kimani et al. (2022), who argue that implementation of market development strategy in isolation, may not yield remarkable performance outcomes, therefore, for universities to record improved performance for market expansion should be complemented by internal development strategies such as curriculum innovation, faculty capacity building and operational efficiency, without which universities may face the risk overstretching their resources and underperforming in new markets.

The results from this study from a theoretical perspective are supported by the Resource-Based View and the Strategic Fit theories, which align with Karanja and Nderitu (2021) position, that universities are better positioned to achieve sustainable competitive advantage by matching market expansion strategies with their unique internal capabilities such as academic quality, strategic partnerships and technological strengths. From the Strategic Fit Theory (Venkatraman & Camillus, 1984; Zajac et al., 2000) posits that successful implementation of market development strategy depends on the degree of alignment between organizational internal

resources and external opportunities, therefore, the moderate effect of market development strategy and university performance observed suggests that while market development contributes positively to university performance, its success is depends on the fit between institutional capacity and market demands.

The findings affirm that market development strategy has a statistically significant and positive effect on university performance, however, its effectiveness depends on strategic alignment with institutional capabilities and the external competitive landscape and therefore, universities should consider adopting an integrated approach to strategy implementation by combining market expansion with internal capacity development in order to achieve long-term growth and competitiveness. The study findings contribute to empirical literature by confirming that market development is a significant predictor of performance in Kenyan universities, consistent with prior findings by Njoroge and Otieno (2022), Mwangi and Wanjiru (2021) and Kimani et al. (2022).

5.5 Diversification and University Performance

Objective four of this study sought to determine the effect of diversification strategy on the performance of chartered universities in Kenya and the simple linear regression analysis results ($\beta = –0.244$, $t = –1.688$, $p > 0.05$) show that diversification strategy is not a significant predictor of university performance, with the negative beta value and failure to reject the null hypothesis indicating that diversification strategy in the higher education sector is does not significantly enhance performance outcomes for chartered universities in Kenya.

This finding differs with a number of previous studies that reported positive associations between diversification strategy and institutional performance such as Kimani and Waweru (2021) who established that universities venturing into online education and vocational training experienced recorded improved financial performance and student enrollment. Karanja and Otieno (2023) also stated that select Kenyan universities that diversified into offering short professional courses and consultancy services improved financial resilience and competitiveness among, but the results of this study suggest that such benefits are not universally applicable across all institutions owing to the differences in institutional capacity, market conditions and policy frameworks.

However, the findings of this study align with Mutua et al. (2022), who reported mixed outcomes from diversification initiatives and found out that while some institutions recorded

improved performance as a result of implementing diversification strategy, others institutions faced performance setbacks due to inadequate resources and lack of focus, in addition, Oduor and Njeri (2023) also emphasized that diversification requires considerable infrastructure, market analysis and prior training of the teaching staff without which universities may incur high operational costs without matching performance outcomes.

The results of this study further support the view by Mugambi et al. (2023) who argue that poorly aligned diversification strategy can over stretch institutional resources and lead to inefficiencies, particularly when undertaken without adequate strategic and financial preparation, therefore, universities overextending into unrelated ventures may dilute institutional focus and lead to a rise in costs, undermining performance rather than enhancing it.

The findings of this study from a theoretical perspective, are consistent with the Strategic Fit Theory (Venkatraman & Camillus, 1984; Zajac et al., 2000), which argues that organizational success depends on the alignment between internal capabilities and the external environment, where in this case, implementation of diversification strategies with inadequate internal resources and market alignment represent a strategic misfit, therefore, universities that venture into new academic or commercial areas without sufficient funding, faculty expertise and conducting a demand analysis may experience performance gains.

From the Resource-Based View (RBV) perspective, performance gains from diversification strategy can only occur when institutions possess distinctive internal capabilities such as strong academic infrastructure, managerial competence and financial stability to support new ventures, however, many Kenyan universities face resource constraints that limit their ability to manage diversified programs effectively, explaining the lack of significant performance outcomes from implementation of diversification strategy.

This study affirms that the implementation of diversification strategy alone does not guarantee improved performance in universities and the absence of a significant positive relationship underscores the importance of strategic alignment, resource adequacy and contextual readiness and aligns with earlier studies by Karanja and Otieno, 2023; Kimani and Waweru, 2021 who state that diversification can enhance performance under favorable conditions, the current findings support the view that its success is highly dependent on institutional and market-specific factors.

Diversification strategy was found to be an insignificant predictor of university performance among chartered universities in Kenya suggesting that when universities implement diversification with insufficient resources, inadequate market research and strategic alignment, may fail to experience the associated benefits, therefore, universities should consider adopting a cautious and data-driven approach to diversification, ensuring that new ventures correspond with the institutional mission, internal capacity and prevailing market demands.

5.6 Joint Ansoff Growth Strategies and University Performance

Objective five of this study sought to determine the effect of joint Ansoff growth strategies on the performance of chartered universities in Kenya and the study tested the hypothesis five that stated that joint Ansoff growth strategies do not have a significant effect on the performance of chartered universities in Kenya.

The results of the multiple regression analysis revealed that implementation of joint Ansoff growth strategies comprising of market penetration, product development, market development and diversification has a statistically significant effect on university performance of chartered universities in Kenya ($F = 4.596$, $p < 0.05$) which led to the rejection of the null hypothesis, affirming that the application of joint Ansoff growth strategies enhances the performance of chartered universities in Kenya.

The findings of this study align with prior research, which has emphasized the role of growth strategies in improving institutional performance with Mwangi and Otieno (2022) establishing that universities that implemented Ansoff growth strategies experienced enhanced performance marked in improved student enrollment, financial sustainability and overall institutional competitiveness and their research emphasizin that the joint application of these strategies creates combined effect allowing universities to expand their market reach, introduce new academic programs and strengthen their existing offerings, findings that are similar to this study that established an increase in the joint use of Ansoff growth strategies leads to enhanced university performance.

Njoroge et al. (2023) also examined the effect of joint implementation of market penetration, product development, market development and diversification on the performance of higher education institutions in Kenya and established when universities implement individual strategies there were varying levels of effect as compared to their joint implementation which

resulted in a more significant effect on institutional success as a result, this study's findings align with Njoroge et. al., (2023) who argue that universities that adopted a combined approach such as introducing new programs while at the same time expanding to new markets, universities are more likely to achieve long-term growth supporting the assertion that the collective use of Ansoff growth strategies significantly influences university performance.

The findings of this study bring out the importance of implementing combined Ansoff growth strategies in order to enable institutions growth their revenue streams, respond to changing needs of the student and employers as well as enabling universities maintain a competitive advantage in the education sector. The results further demonstrated that market penetration and market development strategies had significant, positive correlations with university performance suggesting that while these strategies jointly contribute to university performance, their effect is stronger when applied jointly.

This study findings also align Gakure et al. (2011), who conducted a study to examine the effect of diversification strategies in Kenyan private universities and established that diversification strategy determines organizational performance despite the fact that universities are faced with financial limitations and declining student enrollments, these study findings match with the conclusion of this study that while diversification strategy alone does not have a significant effect on the performance chartered universities in Kenya, it plays a critical role when combined with other growth strategies.

These results do not only indicate the importance of chartered universities in Kenya adopting a comprehensive strategic approach to growth by combining various Ansoff growth strategies while ensuring that funding policies effectively support their implementation, but also contribute to building literature relating to strategy implementation in the higher education sector by confirming that growth strategies are instrumental in driving university performance, but their success depends on supportive institutional funding policies and market responsiveness.

While the findings of this study support the importance of effective implementation of Ansoff growth strategies on university performance, some studies have cautioned against chartered universities over-relying on these strategies without considering institutional capabilities and external market conditions with Oduor and Achieng (2023) stating that universities may experience operational inefficiencies and reduced service quality if they implement growth

without adequate funding policies that guide the allocation and generation of financial resources together with infrastructural capacity suggesting that while Ansoff growth strategies are effective, their success implementations relies on resource availability.

5.7 Effect of Funding Policy on the Relationship between Ansoff Growth Strategies and University Performance

Objective six of the study sought to determine the moderating effect of funding policy on the relationship between Ansoff growth strategies and the performance of chartered universities in Kenya and the corresponding hypothesis stating that funding policy does not have significant moderating effect on the relationship between AGS and university performance tested using the PROCESS Macro for regression analysis, revealing a positive (F = 27.3626) and statistically significant (p < 0.05) moderating effect of funding policy on university performance suggesting that while Ansoff growth strategies on their own have a positive effect on performance of chartered universities in Kenya, their effectiveness is significantly strengthened or weakened by the nature and structure of institutional funding policies.

This result of this study align with previous findings by Ang et al. (2022), who emphasized the role of revenue generation and strategic spending in improving institutional outcomes, this study supports the this perspective in a different way in that, unlike previous research that examined funding mechanisms in a general or isolated manner, this study specifically examined the interactive effect of funding policy and Ansoff growth strategies, thus offering a more better understanding of strategic alignment within the higher education sector with the finding that funding policy strengthens the relationship between Ansoff growth strategies and university performance by 28.94% representing a quantifiable contribution that enhances the accuracy of existing models.

Panjaitan et al. (2019) states that the funds allocation efficiency is a predictor of financial performance, this study diverges from findings of this study by showing that funds allocation policies, when evaluated as a moderating variable, may not significantly enhance strategic outcomes with the difference revealing a sector-specific challenge in the Kenyan university related to rigid bureaucratic processes and inefficiencies. Thus, the study contributes new knowledge by challenging the assumption that fund allocation alone guarantees institutional success and also recommends further research into the mechanisms through which funding

structures support funds generation and allocation of financial resources in different university contexts.

Having conducted the research in Kenya, a country with a unique mix of public and private chartered universities faced with underfunding, increasing enrollment pressures and shifting policy environments, the study provides evidence of the influence of funding policies on the relationship between growth strategies and university performance, therefore, it responding to the call by scholars such as Sande (2019) for more sector analyses that consider how institutional financial ecosystems interact with strategy implementation. Even though the findings of this study align with findings of previous studies, this study brings a more detailed understanding of how funds generation and funds allocation policies influence the successful implementation of growth strategies in chartered universities in Kenya implications that are particularly valuable for policymakers and university administrators, as they show the importance of supportive funding policies in strategy implementation.

This study adds to the already existing knowledge by showing that funding policy determines the successful implementation of strategy either by strengthening or weakening the relationship between strategy implementation and university performance. but functions as a critical amplifier or inhibitor of strategic effectiveness bring a deeper understanding that helps apply Ansoff's growth strategy where resource are limited.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter gives a summary of the major findings of the study and conclusions of the study. The chapter also discusses recommendations for policy as well as suggestions for further studies.

6.2 Summary of Findings

The main objective of the study was to examine the moderating effect of funding policy on the relationship between Ansoff growth strategies and university performance which sought to determine the individual and joint effects of Ansoff growth strategies comprising of market penetration, product development, market development and diversification on the performance of chartered universities in Kenya. Data was collected from 54 chartered universities across the country and the findings revealed that chartered universities in Kenya implement various Ansoff growth strategies to enhance competitiveness and institutional performance and that they have formal funding policies that guide resource generation and allocation.

Objective one of the study sought to establish the effect of market penetration strategy on the performance of chartered universities in Kenya and the corresponding hypothesis which stated that market penetration strategy does not have significant effect on university performance was tested revealing that market penetration strategy has a significant effect on the performance of chartered universities in Kenya.

Objective two of the study sought to establish the effect of product development strategy on the performance of chartered universities in Kenya and the corresponding hypothesis stated that product development strategy does not have significant effect on the performance of chartered universities in Kenya was tested with the results establishing that product development strategy does not have a significant effect on the performance of chartered universities in Kenya.

Objective three of the study sought to examine the effect of market development strategy on the performance of chartered universities in Kenya with the corresponding hypothesis stating that market development strategy does not have significant effect on university performance

tested and the results revealed that market development strategy has a significant effect on the performance of chartered universities in Kenya.

Objective four of the study sought to determine the effect of diversification strategy on the performance of chartered universities in Kenya and the corresponding hypothesis stating that diversification strategy does not have significant effect on university performance tested revealing that diversification strategy does not significantly influence the performance of chartered universities in Kenya.

Objective five of the study sought to determine the joint effect of Ansoff growth strategies comprising of market penetration, product development, market development and diversification on the performance of chartered universities in Kenya with the corresponding hypothesis stating that the four Ansoff growth strategies jointly do not have significant effect on university performance and the study findings established that the four Ansoff growth strategies jointly have an effect on the performance of chartered universities in Kenya.

Finaly, objective six of the study which sought to examine the moderating effect of funding policy on the relationship between Ansoff growth strategies and university performance and the corresponding hypothesis stating that funding policy does not have significant moderating effect on this relationship was tested the results establishing that funding policy significantly strengthens the relationship between Ansoff growth strategies and university performance.

6.3 Conclusions of the Study

The main of this study was to establish the moderating effect of funding policy on the relationship between Ansoff growth strategies and performance of chartered universities in Kenya and concludes that market penetration strategy has a significant effect on the performance of chartered universities in Kenya. In addition, market penetration emerged as a strong predictor of university performance, suggesting its role in enhancing competitiveness and institutional visibility across both public and private universities. The results indicate that while public universities benefit from expanded enrollment and outreach programs supported by government policy, private universities leverage aggressive marketing and flexible fee structures to attract and retain students.

While market development strategy also demonstrated a positive and significant correlation with performance, the relationship was relatively weak, suggesting that while expanding into

new markets can enhance institutional success, it should be complemented by other strategic initiatives. This trend was evident in both public and private universities, where regional expansion and satellite campuses contributed to moderate gains in student enrollment and visibility.

In contrast, product development strategy did not exhibit a significant effect on university performance, indicating that introducing new academic programs alone may not necessarily lead to improved university performance. This outcome was consistent across both public and private institutions, suggesting that without adequate market research, infrastructure and staff capacity, diversification of programs may not yield the intended performance gains. Similarly, diversification strategy was found to have no significant effect on performance, reinforcing the notion that universities should prioritize strategic alignment and resource capacity before pursuing diversification efforts.

The study concludes that the joint application of Ansoff growth strategies comprising market penetration, product development, market development and diversification has a significant effect on the performance of chartered universities in Kenya. The joint application of these strategies, rather than their individual implementation, emerged as a more reliable predictor of university performance. This underscores the importance of a comprehensive and integrated strategic approach across both public and private universities to enhance institutional performance.

With a notable moderating effect of 28.94% in the relationship between Ansoff growth strategies and university performance, funding policies particularly those centered on funds generation were found to enhance the effectiveness of growth strategies. This underscores the critical role of funding policy in the successful execution of strategic initiatives. Public universities rely heavily on government subventions and research grants, while private universities depend largely on tuition fees and partnerships, demonstrating that funding structures distinctly shape strategic outcomes across institutional types. The study therefore concludes that Ansoff growth strategies, funding policy and their interaction are statistically significant predictors of the performance of chartered universities in Kenya.

Overall, these findings contribute to the broader understanding of strategic management in higher education by demonstrating that while growth strategies are essential for institutional success, their effectiveness is largely dependent on supportive funding policies. Universities—

both public and private should adopt a balanced approach that integrates funding policies with well-planned growth initiatives to enhance performance and sustainability.

This study specifically validates the market penetration strategy as a significant predictor of performance in the unique operational context of chartered universities in Kenya. This contextual insight is critical for local policymakers and university administrators seeking evidence-based strategic planning. In addition, the study offers empirical evidence with specific statistical measures such as R-values, R^2 and significance levels that quantify the extent to which strategies like market penetration and market development influence university performance. This adds precision to existing literature, which often discusses these relationships qualitatively.

Although the study was conducted within the Kenyan context, its conceptual framework and empirical findings are applicable to other developing economies with similar higher education structures and funding challenges. However, replication in different contexts is recommended to validate the generalizability of the results beyond Kenya.

6.4 Recommendations of the Study

While this study provides valuable insights into the relationship between Ansoff growth strategies, funding policy and university performance, there remain areas that warrant further investigation.

6.4.1 Recommendations for Practice

Chartered universities in Kenya should adopt a strategic and coordinated approach in implementing Ansoff Growth Strategies alongside well-aligned funding policies to enhance institutional performance. The following recommendations are proposed:

Chartered universities should prioritize market penetration strategies to strengthen their competitive positioning and performance. Institutions are encouraged to intensify student recruitment and retention through improved marketing communication, alumni engagement and digital outreach. Additionally, universities should consider adopting flexible tuition payment plans, loyalty programs for continuing students and strong customer relationship management systems to enhance enrollment and retention rates.

Although product development did not have a significant effect on university performance, universities should not disregard its potential contribution when properly executed. Institutions should focus on consolidating existing programs by enhancing their quality, relevance and delivery methods rather than indiscriminately introducing new courses. Program reviews should be evidence-based, guided by market demand studies and stakeholder consultations. Universities should also invest in faculty capacity development and curriculum innovation that aligns with national skills needs and global academic standards.

Since market development was found to be a significant predictor of performance, universities should strengthen their outreach to new markets. This can be achieved through expanding online and distance learning programs, establishing regional learning centres and forging partnerships with foreign universities to attract international students. Universities should also consider diversifying their marketing channels and investing in digital platforms to reach non-traditional student populations, including working professionals and international learners.

Given that diversification had no significant effect on university performance, universities should adopt a cautious and strategic approach when pursuing diversification initiatives. Efforts should focus on mission-related ventures such as consultancy services, executive education and applied research commercialization, rather than unrelated business ventures. Diversification decisions should be preceded by comprehensive feasibility studies and aligned with the university's capacity, financial resources and strategic goals to prevent resource strain and inefficiencies.

The study established that the joint implementation of Ansoff growth strategies significantly influences university performance. It is therefore recommended that universities integrate market penetration, product development, market development and diversification strategies into a coherent strategic framework. This integrated approach should be coordinated through institutional strategic planning units to ensure alignment, resource optimization and synergy among different departments.

In view of the significant moderating role of funding policy, universities should align their funding policy with their strategic objectives. Institutions should enhance internal revenue generation mechanisms, strengthen financial governance structures and prioritize resource allocation to activities that directly support growth strategies. Furthermore, funding policies

should emphasize sustainability through diversified income streams, cost efficiency and transparency in fund utilization to support long-term institutional performance.

6.4.2 Implications for Theory and Practice

This study contributes to the theoretical understanding of strategic management in higher education by reaffirming the applicability of Ansoff growth strategies in the university context. The findings support strategic management theories that emphasize the importance of growth-oriented decision-making in enhancing institutional performance. Additionally, the study introduces funding policy as a crucial moderating factor, expanding the theoretical discourse on how financial frameworks influence strategic outcomes.

From a practical perspective, university administrators and policymakers can use these findings to refine institutional strategies for growth and sustainability. The study underscores the need for universities to adopt a comprehensive approach to growth by integrating multiple strategic initiatives rather than relying on isolated strategies. In addition, the critical role of funding policy suggests that universities should engage in proactive financial planning and revenue diversification to enhance the success of their strategic plans.

6.4.3 Recommendations for Further Research

Future research should explore the applicability of Ansoff Growth Strategies in other types of educational institutions, including Technical and Vocational Education and Training (TVET) institutions, teacher training colleges and private tertiary institutions, to determine whether similar strategic patterns and outcomes are observable across different educational contexts. In addition, employing qualitative approaches such as in-depth interviews, focus group discussions, or institutional case studies could yield deeper insights into the contextual and behavioral aspects of strategy implementation within universities.

Further studies should also consider examining other potential moderating variables that may influence the relationship between growth strategies and university performance beyond funding policy. Such variables could include leadership style, which affects strategic decision-making and execution; organizational culture, which shapes institutional adaptability and innovation; technological capability, which influences digital transformation and service delivery; and government policy environment, which affects resource allocation, regulation and competitiveness in higher education. Exploring these moderating factors would provide a

more holistic understanding of how internal and external contexts shape the success of strategic initiatives.

Finally, the current study was based on cross-sectional research design whereby data was collected at one point in time. Thus, future studies should use longitudinal research design so as to track the long-term effects of Ansoff Growth Strategies on university performance. Such studies would offer valuable insights into the sustainability, adaptability and cumulative impact of strategic choices over time, thereby enriching the body of knowledge on strategic management and institutional performance in the higher education sector.

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APPENDICES

Appendix A: Introductory Letter

EGERTON UNIVERSITY
P.O. Box 536 - 20115
Egerton, Njoro, Kenya
Email: bpgs@egerton.ac.ke
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Tel: Pilot: 254-51-2217620
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OFFICE OF THE DIRECTOR GRADUATE SCHOOL

Ref: CD11/12290/16 Date: 25th September, 2023

The Director General
National Commission for Science Technology and Innovation,
P. O. Box 30623-00100
NAIROBI.

Dear Sir,

RE: REQUEST FOR RESEARCH PERMIT – MS. PATRICIAH WANJERI MURAGE REG. NO. CD11/12290/16

This is to introduce and confirm to you that the above named student is in the Department of Business Administration, Faculty of Commerce, Egerton University.

She is a bona-fide registered Ph.D. student in this University. Her research topic is **"Ansoff Growth Strategies, Funding Policy and Performance of Chartered Universities in Kenya."**

She is at the stage of collecting field data. Please issue her with a research permit to enable her undertake the studies.

Your kind assistance to her will be highly appreciated.

Yours faithfully,

DIRECTOR, BOARD OF POST GRADUATE STUDIES
27 SEP 2023
EGERTON UNIVERSITY P.O. BOX 536-20115 EGERTON

Prof. S.P. Nyalala, Ph.D
DEPUTY DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES

SPN/mm

"Transforming Lives Through Quality Education"

Appendix B: Chartered Universities in Kenya

	ACCREDITED UNIVERSITIES	Year of establishment	Year of award of charter
	Public Chartered Universities		
1.	University of Nairobi (UoN)	1970	2013
2.	Moi University (MU)	1984	2013
3.	Kenyatta University (KU)	1985	2013
4.	Egerton University (EU)	1987	2013
5.	Jomo Kenyatta University of Agriculture & Technology (JKUAT)	1994	2013
6.	Maseno University (Maseno)	2001	2013
7.	Masinde Muliro University of Science and Technology (MMUST)	2007	2013
8.	Dedan Kimathi University of Technology	2007	2012
9.	Chuka University	2007	2013
10.	Technical University of Kenya	2007	2013
11.	Technical University of Mombasa	2007	2013
12.	Pwani University	2007	2013
13.	Kisii University	2007	2013
14.	University of Eldoret	2010	2013
15.	Maasai Mara University	2008	2013
16.	Jaramogi Oginga Odinga University of Science and Technology	2009	2013
17.	Laikipia University	2009	2013
18.	South Eastern Kenya University	2008	2013
19.	Meru University of Science and Technology	2008	2013
20.	Multimedia University of Kenya	2008	2013
21.	University of Kabianga	2009	2013
22.	Karatina University	2010	2013
23.	Kibabii University	2011	2015
24.	Rongo University	2011	2016
25.	The Co-operative University of Kenya	2011	2016
26.	Taita Taveta University	2011	2016
27.	Murang'a University of Technology	2011	2016
28.	University of Embu	2011	2016
29.	Machakos University	2011	2016
30.	Kirinyaga University	2011	2016
31.	Garisa University	2011	2017
32.	Alupe University		2022

	ACCREDITED UNIVERSITIES	Year of establishment	Year of award of charter
33.	Kaimosi Friends University		2022
34.	Tom Mboya University		2022
35.	Tharaka University		2022
	Private Chartered Universities		
1.	University of Eastern Africa, Baraton	1989	1991
2.	Catholic University of Eastern Africa (CUEA)	1989	1992
3.	Daystar University	1989	1994
4.	Scott Christian University	1989	1997
5.	United States International University	1989	1999
6.	Africa Nazarene University	1993	2002
7.	Kenya Methodist University	1997	2006
8.	St. Paul's University	1989	2007
9.	Pan Africa Christian University	1989	2008
10.	Strathmore University	2002	2008
11.	Kabarak University	2002	2008
12.	Mount Kenya University	2008	2011
13.	Africa International University	1989	2011
14.	Kenya Highlands Evangelical University	1989	2011
15.	Great Lakes University of Kisumu	2006	2012
16.	KCA University	2007	2013
17.	Adventist University of Africa	2005	2013
18.	KAG - EAST University	1989	2016
19.	Umma University		2019
20.	Presbyterian University of East Africa		2020
21.	Aga Khan University		2021
22.	Kiriri Women's University of Science and Technology		2022
23.	The East African University		2022
24.	Zetech University		2022
25.	Lukenya University		2022

Source: CUE (2022)

Appendix C: Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **679741**

Date of Issue: **12/October/2023**

RESEARCH LICENSE

This is to Certify that Ms.. Patriciah Wanjeri Murage of Egerton University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in on the topic: Ansoff Growth Strategies, Funding Policy and Performance of Chartered Universities in Kenya for the period ending : 12/October/2024.

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The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
    i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
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4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
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14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix D: Sample Request Letter for Data Collection

Patriciah Murage
CD11/12290/16
Department of Business Administration
Faculty of Commerce
Egerton University
Mobile: 0722-22 51 94
Email: pattiemurage@gmail.com

22nd November, 2023

Vice Chancellor
University of Eldoret
P. O. Box 1125-30100
ELDORET

Dear Sir,

RE: REQUEST TO COLLECT DATA

I hope this letter finds you well. My name is Patriciah Wanjeri Murage and I am a Ph.D. student at Egerton University, currently pursuing research study entitled Ansoff Growth Strategies, Funding Policy and performance of chartered universities in Kenya. I am writing to request your esteemed institution's participation in this study that aims to investigate the interplay between strategic growth approaches, university funding policies and the overall performance of chartered universities in Kenya.

The primary objective of my research is to gain deeper insights into the strategies employed by chartered universities in Kenya, with a specific focus on how they utilize Ansoff Growth Strategies and institutional funds generation and allocation policies to enhance their overall performance. The knowledge derived from this research will not only contribute to the academic discourse but also provide actionable recommendations will help higher education institutions in Kenya and beyond to make more informed strategic decisions.

The research methodology involves the completion of a comprehensive questionnaire that has been designed to capture essential data related to growth strategies, funding policies and performance indicators. Your participation is of great significance and I assure you that all responses will be kept confidential and anonymized to ensure the utmost privacy and data security.

Considering your busy schedule, feel free to designate a representative from your institution who is knowledgeable about strategic planning, funding policies (funds generation and allocation) and university performance to complete the questionnaire.

Attached find a copy of an approved Research License Number 679741.

Sincerely,

Patriciah Murage

Encl.

Appendix E: Study Questionnaire

Instructions: Kindly provide responses for every item in the spaces provided.

SECTION A: INSTITUTIONAL PROFILE

1. Which of the following types best describes your institution?

   Public University [ ] Private University [ ]

2. If private indicate the nature of ownership:

   Locally owned [ ] Foreign owned [ ] Faith Based [ ] Non-Faith Based [ ]

   Other (please specify) …...…….……...……

3. What levels of qualification are offered at your university? (Please select <u>all</u> that apply)

   Certificate [ ] Diploma [ ] Degree [ ] Masters [ ] PhD [ ]

4. Has a formal funding policy been elaborated at the university?

   Yes [ ] No [ ] Not Sure [ ]

5. The university funding policy has been operational for the last four years?

   Yes [ ] No [ ] Not Sure [ ]

6. Does the funding policy provide for guidelines on funds generation?

   Yes [ ] No [ ] Not Sure [ ]

7. Does the funding policy provide for guidelines on funds utilization?

   Yes [ ] No [ ] Not Sure [ ]

8. The university strategic plan covers a period between:

   1–3 years [ ] 3–5 years [ ] over 5 years [ ]

9. What is the average number of enrolled students in the university?

   Certificate …….….. Diploma …….…..…. Degree ……..….. Masters …….……..

   PhD ……..

SECTION B: ANSOFF GROWTH STRATEGIES

On a scale of 1-5, please tick (√) only one response in a row, that indicates the Ansoff growth strategies that the university has adopted during the past three academic years (2018/19; 2019/20 and 2020/21) where: 1=Strongly Disagree; 2=Disagree; 3=Neither Agree nor disagree 4=Agree; and 5=Strongly Agree.

Statement	1	2	3	4	5
(i) MARKET PENETRATION					
a) The university restructured and spread fee payment in instalments.	1	2	3	4	5
b) The university adjusted tuition fees for particular programs to match those of other universities.	1	2	3	4	5
c) The university offered bursary to needy students.	1	2	3	4	5
d) The university used social media to promote existing academic programs.	1	2	3	4	5

Statement	1	2	3	4	5
e) The university used print media advertisement to promote existing academic programs.	1	2	3	4	5
f) The university engaged in electronic media advertisement of existing academic programs.	1	2	3	4	5
g) The university undertook staff training.	1	2	3	4	5
h) The university maintained valuable data about its stakeholders.	1	2	3	4	5
i) The university shared information about its academic programs with its prospects.	1	2	3	4	5
j) The university shared information with its alumni about the university academic programs.	1	2	3	4	5
(ii) PRODUCT DEVELOPMENT					
a) Research and development activities informed the university's understanding of its customer needs.	1	2	3	4	5
b) The university undertook curriculum review of its academic programs.	1	2	3	4	5
c) The university developed new academic programs.	1	2	3	4	5
d) The university developed of online academic programs.	1	2	3	4	5
e) The university developed distance learning academic programs.	1	2	3	4	5
(iii) MARKET DEVELOPMENT					
a) Social media platforms were used to promote university academic programs and services.	1	2	3	4	5
b) The university website appeared high on the list of search engines results such as Google.	1	2	3	4	5
c) The university used pay per click advertising or its products and services.	1	2	3	4	5
d) The university undertook search engine advertising for its products and services.	1	2	3	4	5
e) The university offered joint programs with other institutions.	1	2	3	4	5
f) The university offered its courses to international students.	1	2	3	4	5
g) New university campus colleges were set up in different counties in Kenya	1	2	3	4	5
h) The university set up satellite campuses in other countries.	1	2	3	4	5
i) The university offered self-sponsored academic programs.	1	2	3	4	5
j) The university adopted new modes of delivering existing academic programs such as online programs	1	2	3	4	5
(iv) DIVERSIFICATION					
a) The university acquired other learning institutions.	1	2	3	4	5
b) The university ventured into research consultancy services for companies.	1	2	3	4	5
c) University academic programs were customized to suit corporate needs.	1	2	3	4	5
d) The university was engaged by the corporate market to address their training needs.	1	2	3	4	5

Statement	1	2	3	4	5
e) Besides teaching and research the university ventured into other income generating activities.	1	2	3	4	5
f) The university partnered with other companies for revenue generating activities.	1	2	3	4	5
g) The university took over professional guidance and counselling activities in high schools.	1	2	3	4	5
h) The university offered scholarships to college graduates.	1	2	3	4	5
i) The university received loyalties on intellectual property.	1	2	3	4	5
j) The university ventured into university-industry collaboration.	1	2	3	4	5
k) The university set up job placement centers.	1	2	3	4	5

SECTION C: FUNDING POLICY

For each of the following university sources of funds that describe the overall funds generation policy, please tick (√) only one response at each row which indicate the funds generation activities over the past three years (2018/19; 2019/20 and 2020/21) whereby where: 1=Strongly Disagree; 2=Disagree; 3=Neither Agree nor disagree 4=Agree; and 5=Strongly Agree.

Source of funds	1	2	3	4	5
(i) FUNDS GENERATION POLICY The university funds generation policy provides for sources of funds as:					
a) Government capitation	1	2	3	4	5
b) Tuition fees (regular students)	1	2	3	4	5
c) Tuition fees (module II students)	1	2	3	4	5
d) Tuition from certificate & diploma courses	1	2	3	4	5
e) Consultancy Services	1	2	3	4	5
f) Hiring out university facilities	1	2	3	4	5
g) Leasing of university land	1	2	3	4	5
h) University-local partnership output	1	2	3	4	5
i) University-foreign partnership output	1	2	3	4	5
j) Commercialization of research output	1	2	3	4	5

On a scale of (1-5), kindly indicate the funds allocation activities over the past three years (2018/19; 2019/20 and 2020/21). Please tick (√) one response at each row where: 1=Strongly Disagree; 2=Disagree; 3=Neither Agree nor disagree 4=Agree; and 5=Strongly Agree.

Activity	1	2	3	4	5
(ii) FUNDS ALLOCATION POLICY The university has over the past three years allocated funds to the following activities:					
a) Delivery of distance and online education and/or e-learning courses.	1	2	3	4	5
b) Online marketing of university programs	1	2	3	4	5
c) Offline marketing of university programs	1	2	3	4	5
d) Provision for university scholarships	1	2	3	4	5
e) Developing new courses	1	2	3	4	5
f) Curriculum review	1	2	3	4	5
g) Expanding into new geographical areas.	1	2	3	4	5
h) Developing of university- foreign industry partnerships.	1	2	3	4	5
i) Developing of university-local institutional collaborations.	1	2	3	4	5
j) Developing of university-foreign institutional collaborations	1	2	3	4	5
k) Research Funding.	1	2	3	4	5
l) Intellectual property rights for research results.	1	2	3	4	5
m) Faculty training	1	2	3	4	5
n) Investment in commercial activities	1	2	3	4	5

SECTION D: UNIVERSITY PERFORMANCE

a) What is the average number of **students enrolled** for university academic programs during the following academic years?

	2018/2019	2019/2020	2020/2021
(i) Bachelors	_____	_____	_____
(ii) Masters	_____	_____	_____
(iii) PhD	_____	_____	_____

b) What is the average number of **students who completed their studies** within the stipulated period of study?

	2018/2019	2019/2020	2020/2021
(i) Bachelors	_____	_____	_____
(ii) Masters	_____	_____	_____
(iii) PhD	_____	_____	_____

c) Kindly indicate the average number of **faculty recruited** during the following academic years:-

	2018/2019	2019/2020	2020/2021
(i) Lecturers	_____	_____	_____
(ii) Senior Lecturers	_____	_____	_____
(iii) Professors	_____	_____	_____

d) What is the average number of **students on university scholarships** during the following academic years?

	2018/2019	2019/2020	2020/2021
(i) Bachelors	_____	_____	_____
(ii) Masters	_____	_____	_____
(iii) PhD	_____	_____	_____

e) What is the average number of **research publications** during the following academic years?

	2018/2019	2019/2020	2020/2021
(i) Bachelors	_____	_____	_____
(ii) Masters	_____	_____	_____
(iii) PhD	_____	_____	_____

f) What is the number of **university collaborations** developed during the following academic years?

	2018/2019	2019/2020	2020/2021
(i) Local	_____	_____	_____
(ii) International	_____	_____	_____

***** THANK YOU *****

Appendix F: Factor Analysis Results

Table (1): KMO and Bartlett's Test

Variable	KMO and Bartlett's Test		
Market Penetration Strategy	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.577
	Bartlett's Test of Sphericity	Approx. Chi-Square	75.881
		Df	45
		Sig.	0.003
Product Development Strategy	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.516
	Bartlett's Test of Sphericity	Approx. Chi-Square	20.090
		Df	10
		Sig.	0.028
Market Development Strategy	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.602
	Bartlett's Test of Sphericity	Approx. Chi-Square	130.553
		Df	45
		Sig.	0.001
Diversification Strategy	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.471
	Bartlett's Test of Sphericity	Approx. Chi-Square	92.606
		Df	55
		Sig.	0.001
Funding Generation Policy	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.487
	Bartlett's Test of Sphericity	Approx. Chi-Square	78.498
		Df	45
		Sig.	0.001
Funding Allocation Policy	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.623
	Bartlett's Test of Sphericity	Approx. Chi-Square	152.221
		Df	91
		Sig.	0.003

Table (2): Principal Factor Analysis for Market Penetration Strategy

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.360	23.599	23.599	2.360	23.599	23.599
2	1.818	18.181	41.780	1.818	18.181	41.780
3	1.383	13.832	55.612	1.383	13.832	55.612
4	1.015	10.150	65.762	1.015	10.150	65.762
5	0.819	8.188	73.950			
6	0.726	7.260	81.211			
7	0.630	6.301	87.512			
8	0.488	4.880	92.391			
9	0.436	4.362	96.753			
10	0.325	3.247	100.000			

Extraction Method: Principal Component Analysis.

Table (3): Component Matrix Analysis for Market Penetration Strategy

Items	Component			
	1	2	3	4
a) The university restructured and spread fee payment in instalments.	.467	.313	-.494	-.348
b) The university adjusted tuition fees for particular programs to match those of other universities.	.518	.526	-.397	
c) The university offered bursary to needy students.	-.491	.498		
d) The university used social media to promote existing academic programs.	-.563	.518	.364	
e) The university used print media advertisement to promote existing academic programs.	-.337	.638		
f) The university engaged in electronic media advertisement of existing academic programs.	.562			.402
g) The university undertook staff training.	.563		.510	
h) The university maintained valuable data about its stakeholders.	.339		.378	-.668
i) The university shared information about its academic programs with its prospects.	.520	-.358	.317	.411
j) The university shared information with its alumni about the university academic programs.	.431	.481	.433	

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Table (4): Pattern Matrix Analysis for Market Penetration Strategy

Items	Component			
	1	2	3	4
a) The university restructured and spread fee payment in instalments.		.725		
b) The university adjusted tuition fees for particular programs to match those of other universities.		.818		
c) The university offered bursary to needy students.	.744			
d) The university used social media to promote existing academic programs.	.819			
e) The university used print media advertisement to promote existing academic programs.	.712			
f) The university engaged in electronic media advertisement of existing academic programs.		.573		
g) The university undertook staff training.			.790	
h) The university maintained valuable data about its stakeholders.				.877
i) The university shared information about its academic programs with its prospects.			.562	
j) The university shared information with its alumni about the university academic programs.			.711	

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table (5): Principal Factor Analysis for Product Development Strategy

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.656	33.130	33.130	1.656	33.130	33.130
2	1.172	23.438	56.568	1.172	23.438	56.568
3	1.057	21.141	77.709	1.057	21.141	77.709
4	.658	13.169	90.878			
5	.456	9.122	100.000			

Extraction Method: Principal Component Analysis

Table (6): Component Matrix Analysis for Product Development Strategy

Items	Component		
	1	2	3
a) Research and development activities informed the university's understanding of its customer needs.	0.829		
b) The university undertook curriculum review of its academic programs.	0.506	0.653	
c) The university developed new academic programs.	0.811		
d) The university developed of online academic programs.		0.708	-0.569
e) The university developed distance learning academic programs.		0.339	0.828

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

Table (7): Pattern Matrix Analysis for Product Development Strategy

Items	Component		
	1	2	3
a) Research and development activities informed the university's understanding of its customer needs.	0.885		
b) The university undertook curriculum review of its academic programs.		0.551	
c) The university developed new academic programs.	0.882		
d) The university developed of online academic programs.		0.915	
e) The university developed distance learning academic programs.			0.950

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table (8): Principal Factor Analysis for Market Development Strategy

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.008	30.077	30.077	3.008	30.077	30.077
2	1.609	16.095	46.172	1.609	16.095	46.172
3	1.369	13.685	59.857	1.369	13.685	59.857
4	1.052	10.523	70.381	1.052	10.523	70.381
5	.994	9.935	80.316			
6	.611	6.107	86.423			
7	.556	5.562	91.985			
8	.363	3.633	95.618			
9	.233	2.325	97.943			
10	.206	2.057	100.000			

Extraction Method: Principal Component Analysis.

Table (9): Component Matrix Analysis for Market Development Strategy

Items	Component			
	1	2	3	4
a) Social media platforms were used to promote university academic programs and services.		0.600	0.554	-0.345
b) The university website appeared high on the list of search engines results such as Google.		0.833		
c) The university used pay per click advertising or its products and services.	0.630			
d) The university undertook search engine advertising for its products and services.	0.803			0.362
e) The university offered joint programs with other institutions.	0.547	0.309	-0.380	
f) The university offered its courses to international students.	0.346	0.483	-0.427	0.534
g) New university campus colleges were set up in different counties in Kenya	0.807	-0.339		
h) The university set up satellite campuses in other countries.	0.812			
i) The university offered self-sponsored academic programs.	-0.417			0.467
j) The university adopted new modes of delivering existing academic programs such as online programs			0.711	0.448

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Table (10): Pattern Matrix Analysis for Market Development Strategy

Items	Component			
	1	2	3	4
a) Social media platforms were used to promote university academic programs and services.			.890	
b) The university website appeared high on the list of search engines results such as Google.			.678	
c) The university used pay per click advertising or its products and services.	.695			
d) The university undertook search engine advertising for its products and services.	.648			
e) The university offered joint programs with other institutions.				-.523
f) The university offered its courses to international students.		.938		
g) New university campus colleges were set up in different counties in Kenya	.936			
h) The university set up satellite campuses in other countries.	.854			
i) The university offered self-sponsored academic programs.				.574
j) The university adopted new modes of delivering existing academic programs such as online programs				.853

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table (11): Principal Factor Analysis for Diversification Strategy

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.076	18.872	18.872	2.076	18.872	18.872
2	1.848	16.802	35.674	1.848	16.802	35.674
3	1.480	13.453	49.126	1.480	13.453	49.126
4	1.404	12.760	61.886	1.404	12.760	61.886
5	1.261	11.463	73.349	1.261	11.463	73.349
6	.790	7.181	80.530			
7	.555	5.042	85.573			
8	.536	4.869	90.442			
9	.429	3.896	94.338			
10	.357	3.245	97.584			
11	.266	2.416	100.000			

Extraction Method: Principal Component Analysis.

Table (12): Component Matrix Analysis for Diversification Strategy

Items	Component				
	1	2	3	4	5
a) The university acquired other learning institutions.	0.491	0.479			
b) The university ventured into research consultancy services for companies.		0.303	0.580	-0.328	0.489
c) University academic programs were customized to suit corporate needs.	0.476	-0.527		-0.382	
d) The university was engaged by the corporate market to address their training needs.				0.705	0.520
e) Besides teaching and research, the university ventured into other income generating activities.			.869		
f) The university partnered with other companies for revenue generating activities.	0.802				
g) The university took over professional guidance and counselling activities in high schools.				0.722	-0.324
h) The university offered scholarships to college graduates.		0.827			
i) The university received loyalties on intellectual property.	0.341	0.542			-0.521
j) The university ventured into university-industry collaboration.	0.527		-0.434		0.389
k) The university set up job placement centers.	.632	-.275	.026	.005	-.272

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

Table (13): Pattern Matrix Analysis for Diversification Strategy

Items	Component				
	1	2	3	4	5
a) Social media platforms were used to promote university academic programs and services.		0.813			
b) The university website appeared high on the list of search engines results such as Google.			0.795		
c) The university used pay per click advertising or its products and services.	0.753				
d) The university undertook search engine advertising for its products and services.					0.924
e) The university offered joint programs with other institutions.			0.838		
f) The university offered its courses to international students.	0.700				
g) New university campus colleges were set up in different counties in Kenya				0.903	
h) The university set up satellite campuses in other countries.		0.792			
i) The university offered self-sponsored academic programs.				0.427	
j) The university adopted new modes of delivering existing academic programs such as online programs					0.550
k) The university set up job placement centers.	0.710				

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table (14): Principal Factor Analysis for Funding Allocation Policy

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.488	24.917	24.917	3.488	24.917	24.917
2	1.772	12.656	37.573	1.772	12.656	37.573
3	1.576	11.254	48.827	1.576	11.254	48.827
4	1.237	8.832	57.659	1.237	8.832	57.659
5	1.119	7.994	65.653	1.119	7.994	65.653
6	.997	7.123	72.775			
7	.918	6.556	79.332			
8	.726	5.188	84.519			
9	.506	3.616	88.136			
10	.449	3.206	91.342			
11	.381	2.725	94.066			
12	.360	2.570	96.636			
13	.248	1.773	98.409			
14	.223	1.591	100.000			

Extraction Method: Principal Component Analysis.

Table (15): Component Matrix Analysis for Funding Allocation Policy

Items	Component				
	1	2	3	4	5
a) Delivery of distance and online education and/or e-learning courses.	.329			-.386	.516
b) Online marketing of university programs		.765			
c) Offline marketing of university programs			.684		
d) Provision for university scholarships	.679				
e) Developing new courses			.526	-.439	.400
f) Curriculum review		.370	.504		-.478
g) Expanding into new geographical areas.	.844				
h) Developing of university- foreign industry partnerships.	.739				
i) Developing of university-local institutional collaborations.	.440				
j) Developing of university-foreign institutional collaborations	.699				
k) Research Funding.			.497	.433	.484
l) Intellectual property rights for research results.	.373	.559		.458	
m)Faculty training		.723			
n) Investment in commercial activities	.792				

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

Table (16): Pattern Matrix Analysis for Funding Allocation Policy

Items	Component				
	1	2	3	4	5
a) Delivery of distance and online education and/or e-learning courses.					.671
b) Online marketing of university programs		.659			
c) Offline marketing of university programs			.500		
d) Provision for university scholarships	.646				
e) Developing new courses					.767
f) Curriculum review			.874		
g) Expanding into new geographical areas.	.845				
h) Developing of university- foreign industry partnerships.	.793				
i) Developing of university-local institutional collaborations.				.499	
j) Developing of university-foreign institutional collaborations	.816				
k) Research Funding.				.818	
l) Intellectual property rights for research results.		.583			
m)Faculty training		.824			
n) Investment in commercial activities	.702				

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Appendix G: Publication Extracts

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Market Development Strategy and the Performance of Chartered Universities in Kenya

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ABSTRACT

In recent years, universities in Kenya have encountered significant challenges, including declining government funding, heightened competition and shifting student expectations. To navigate these complexities, institutions have increasingly adopted market-oriented strategies to sustain operations and enhance performance. As a result, chartered universities have embraced various growth strategies to maintain financial stability and remain competitive in the evolving higher education landscape. This study examined the effect of market development on the performance of public and private chartered universities in Kenya. Grounded in the Strategic Fit Theory and the Resource-Based Theory, the study provides insights into how strategic expansion initiatives and financial frameworks shape institutional performance.

This study adopted a cross-sectional research design to facilitate data collection and analysis. The target population comprised all chartered universities in Kenya, including 32 public and 22 private institutions. A census approach was utilized to ensure comprehensive representation. Primary data were gathered using structured questionnaires administered to vice-chancellors or senior management officials appointed by them. Descriptive statistics, such as frequencies, percentages, means and standard deviations, were employed to summarize the data. To test the research hypotheses, simple regression analysis was conducted to examine the relationships between key variables.

The findings revealed significant correlations between market development strategy ($r=0.357$, $p=0.014$) and university performance.

The study recommends that university management and stakeholders prioritize market development strategies.

Keywords: Ansoff Growth Strategy, Market Development Strategy, Social Media Platforms, Pay Per Click Advertising, International Students.

INTRODUCTION

Universities worldwide have undergone significant transformations in governance to address evolving societal, economic, and demographic challenges. As institutions of higher learning continue to fulfill their core mandates of teaching, research and development, they face increasing competition, reduced public funding and global uncertainties [36], [15]. In response, many universities have embraced strategic management practices as a means of enhancing their performance and ensuring long-term sustainability. The adoption of strategic thinking has become essential in navigating the complexities of a rapidly changing environment, influencing institutional success and adaptability [25].

To remain competitive and sustainable, organizations implement various strategic approaches aimed at expansion, market penetration and long-term success. These strategies generally fall into two broad categories: growth strategies and retrenchment strategies. Growth strategies, in particular, are intentional, adaptable and

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Ansoff Growth Strategies and University Performance

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Abstract

Universities in Kenya are facing increasing challenges stemming from reduced public funding and intensifying global competition. These pressures have forced the institutions to adopt more strategic approaches to enhance performance. Although Ansoff growth strategies are commonly utilized in corporate settings, the application of Ansoff's framework within higher education particularly in developing countries such as Kenya is an emerging focus of academic research. This study aimed to examine the relationship between Ansoff Growth Strategies and performance of chartered universities in Kenya, with a focus on how strategic choices influence key performance indicators such as academic output, research innovation and institutional collaboration. The study was anchored on Strategic Fit Theory offering a theoretical foundation for understanding how strategic alignment affects institutional outcomes. A cross-sectional research design was adopted, targeting all 54 chartered universities in Kenya comprising 32 public and 22 private institutions. Primary data was collected using a structured questionnaire administered to vice-chancellors or designated senior management representatives. The analysis of variance (ANOVA) results confirmed that the overall model comprising market penetration, product development, market development, and diversification was statistically significant ($F = 4.596$, $p < 0.05$). Among the strategies, market development exhibited a positive and statistically significant influence on the performance of chartered universities in Kenya ($\beta = 0.417$, $t = 2.789$, $p < 0.05$), whereas diversification had a significant negative effect ($\beta = -0.349$, $t = -2.510$, $p < 0.05$). In contrast, market penetration ($\beta = 0.185$, $t = 1.311$, $p > 0.05$) and product development ($\beta = 0.084$, $t = 0.638$, $p > 0.05$) did not show statistically significant effects on performance. These study findings demonstrate that the joint implementation of Ansoff growth strategies significantly influences the performance of chartered universities in Kenya. The study concludes that the implementation of joint Ansoff growth strategies comprising of market penetration, product development, market development and diversification has a significant positive impact on the