# Influence of Vertical Diversification on Sustainable Organizational Performance of Chartered Private Universities in Kenya

<sup>1</sup>Agnes Mueni Mutinda, <sup>2</sup>Dr. Dennis Juma Okello (PhD), <sup>3</sup>Dr. Hesbon N. Otinga (PhD), <sup>4</sup>Dr. Daniel Kitonga (PhD)

<sup>1</sup>PhD Candidate, Jomo Kenyatta University of Agriculture and Technology, School of Business and Entrepreneurship, Kenya.

<sup>2</sup>Lecturer, Jomo Kenyatta University of Agriculture and Technology, School of Business and Entrepreneurship, Kenya.

<sup>3</sup>Lecturer, Jomo Kenyatta University of Agriculture and Technology, School of Business and Entrepreneurship, Kenya. <sup>4</sup>Lecturer, Tangaza University, Kenya.

#### Abstract

The worldwide Higher Education sector has been revolutionized by globalization, adverse economic circumstances, intense industrial rivalry, and changing demands of the contemporary customer. Private universities are compelled to reconsider their tactics. The present research investigated the implementation of vertical diversification as a crucial approach that private universities might use to achieve sustained organizational performance. The research used a cross-sectional survey approach, including the whole population of 21 private institutions in Kenya. The study used primary data collection via the use of structured research questionnaires. The acquired data was quantified and analyzed using descriptive and inferential statistics via the use of the Statistical Package for Social Sciences (SPSS). The research used Analysis of Variance (ANOVA) to determine the connection between the variables, while correlation and regression analyses were utilized to examine hypotheses and the associations among the variables. The inferential analysis demonstrated a clear and direct correlation between horizontal diversification and the sustainable performance of private institutions in Kenya. Moreover, the research confirmed a statistically significant and beneficial impact of implementing a horizontal diversification strategy on the sustainable performance of private institutions in Kenya. The study recommended that policymakers should consider formulating and implementing policies that encourage and support vertical diversification in chartered private universities in Kenya. Private universities should strategically embrace vertical diversification practices to enhance sustainable organizational performance. This involves continuous efforts to upgrade existing programs, diversify academic offerings, and establish programs that meet the evolving needs of industries.

**Keywords**: Diversification Strategy, vertical Diversification, Sustainable Organizational Performance, Chartered Private Universities

#### Introduction

According to Radinger-Peer and Pflitsch (2017), higher education plays a crucial role in societal, political, and technical advancement. According to Torkington, Stanford, and Guiver (2020), a nation's educational system is the bedrock of its sociopolitical development since it boosts economic growth and productivity. According to Jumaah (2019), higher education is the engine that propels national growth, with skilled workers being the anticipated outcome. There is no underestimating the importance of higher education as a means of societal transformation via the cultivation of future leaders, entrepreneurs, decision-makers, and

academics. Private institutions have a significant issue when it comes to sustainability, according to worldwide trends. One definition of sustainability is the ability of a process to withstand complicated and ever-changing market circumstances and to be maintained permanently (Bigley, 2018).

In order to keep up with the rest of the world and meet the academic trends happening on a global scale, as well as to raise the bar for all students, higher education must be dramatically improved (Ahmed et al., 2020). Given the ever-changing and competitive landscape, private universities face numerous challenges. These include attracting and retaining a sufficient number of students without jeopardizing their financial stability, developing reliable sources of income, ensuring that faculty and staff continue to receive high-quality education that is relevant to the market, and improving the effectiveness of service delivery (Nderitu et al., 2018). In order to achieve their strategic goals and maintain their performance over time, private colleges must take stock of their assets, strengths, and areas of expertise.

The Republic of Kenya report (2017) confirmed that University funding in Kenya was inadequate and significant reduction of student enrollment has led to stiff competition in the university sector. While private universities compete equally for the same students with public universities in Kenya, the latter receives substantial funding and support from the government. Private universities, on the other hand, rely almost entirely on student fees to fund their operations. For private universities therefore, it is no longer optional to seek alternative sources of revenue through income generating activities. Philanthropic funding from external sources and university alumni popularly referred to as 'third income stream' has gained acceptance as a source of revenue diversification for sustainable performance of universities (Masaiti, Mwale, Mkandawire, Mulenga & Sichula, 2022).

The government encouraged the establishment and accreditation of private universities to meet the high demand for university education (Kajawo, 2020), a move that led to over establishment sinking the higher education sector into further pitfalls. Newly registered universities, satellite campuses and constituent colleges were established in various parts of the country, flooding the Higher Education subsector. The first private university in Kenya was the San Diego-based United States International University (USIU) in 1970 when it established a campus in Nairobi. Subsequently, in 1978 Seventh Day Adventists sponsored the establishment of University of Eastern Africa, Baraton, followed in 1984 by the Catholic University of East Africa (CUEA) (CUE report, 2019). As at 2021 there were 21 chartered private universities and 37public universities in Kenya (CUE 2021).

The proliferation of private universities in Kenya provided a reprieve that was long overdue for qualified students who failed to secure admission to Public Universities. However, the reprieve was short lived. The education reforms of 2018 which resulted in the cut off for university entry being reduced to C+ significantly reduced student enrollment in private universities as almost all qualified students joined public universities. This translated to reduced revenue from student fees and as private universities rely almost entirely on student fees to fund all their activities (CUE report, 2019)

Further, significant reduction of student enrollment vis a vis massification of university education subsector, presented sustainability challenges for private universities with the point of focus no longer being growth but sustainable performance. Universities were no longer able to break even with many satellite campuses rapidly closing down. Twenty-eight (28) public and six (6) private satellite campuses closed down between 2016 and 2020 (CUE 2020). Private universities were therefore under immense pressure to rethink their strategies with a view to adopting strategies that guarantee sustainable performance (Nganga & Kibati, 2016).

Vision 2030 is the Kenya's development blueprint whose key objective is to transform Kenya to a middleincome country by the year 2030 (World Bank 2010). Education and training have been recognised as a key enabler for the social pillar of Vision 2030 (World Bank 2010). Kenya aims at creating a globally competitive and adaptive human capital to meet the requirements of Vision 2030 by providing globally competitive and quality education, training and research (Vision 2030). The findings of the current study were relevant to Vision 2030 in that it contributed to the provision of globally competitive and quality education which enabled the training of globally competitive human capital.

## Statement of the Problem

The majority of research on private institutions' diversification initiatives has been on industrialized nations. In order to determine the connection between diversity and competitiveness in modern higher education, Teixeira et al. (2012) examined Portuguese higher education. In contrast, Morris, Fier, and Liebenberg (2017) looked into the US property liability insurance sector to see if there was a correlation between diversification relatedness and company performance. Forty percent of the federal funding for American universities was insufficient, according to research by Sanderson et al. (2017).

According to Santarelli and Tran (2015), a business's profitability is dictated by its level of diversity. They offered insight into the link between diversification strategy and firm performance in Vietnam on this premise. When comparing Turkish, Italian, and Dutch businesses, Ayden, Tatoglu, Glaister, and Demirbag (2020) looked at the connection between organizational production and diversification strategy. The present study aims to fill a knowledge vacuum in emerging countries by examining the relationship between diversification strategies and sustainable organizational performance.

There was an overabundance of private colleges accredited in 2012 as a result of privatization efforts aimed at meeting the strong demand for higher education (Odhiambo, 2013). Among Kenya's higher education institutions, 21 are private and 33 are public (CUE, 2021). It is becoming more difficult to stand out in the highly competitive university subsector due to the fact that both public and private institutions compete for the same pool of students. More so, because all eligible students may enroll in public institutions once the university entrance point was lowered to C+ in 2018, private university enrollment took a nosedive.

The viability of private universities in Kenya was jeopardized by the intense rivalry within the university subsector and the resulting decline in student enrollment. The closure of satellite campuses began. The years 2016–2020 saw the closure of twenty-eight (28) public and six (6) private satellite campuses (CUE 2020). As a result, private colleges and universities have to change their strategies to achieve long-term success (Gakure, Muriu & Orwa, 2011). The present analysis is based on the idea that private colleges may achieve sustainable performance by implementing a diversification strategy in response to declining student enrollment and the resulting revenue losses.

Kenyan researchers have studied diversification strategy and performance in a variety of settings, including governmental institutions, private companies, financial institutions, and industrial firms. Muigai (2021) found that most public universities use diversification strategies to increase growth and decrease risk, while Mathooko and Ogutu (2014) looked at how public universities in Kenya adapted to changing environmental conditions. While Nyakora (2017) looked at how diversification affected Safaricom (K) in terms of competitiveness, Ndege (2018) investigated concentric diversification techniques in cosmetics enterprises in Nakuru County. These studies have, however, ignored private university settings in favor of others. This research gap will be filled by the present investigation.

A large body of empirical data suggests that several scholars agree that diversification strategy and performance are closely related. On the other hand, nobody seems to agree on what the exact nature of the connection is. There is conflicting evidence about the effect of diversification strategies on business success; some studies find a positive correlation, while others find a negative one (Sande, 2019). Additional investigation was necessary due to the contradictory results. In light of this, the present research set out to fill a gap in the literature by investigating how vertical diversification strategies influence sustainable organizational performance of private universities in Kenya.

#### **Objective of the Study**

The objective of the study was to determine the influence of vertical diversification on sustainable organizational performance of chartered private universities in Kenya.

#### **Research Hypothesis**

The study tested the following null hypothesis:

 $H_0$  Vertical diversification does not significantly influence sustainable organizational performance of chartered private universities in Kenya.

#### **Literature Review**

#### **Theoretical Framework**

Strategic Choice Theory was postulated by Child (1972) who viewed organisations as having the ability to respond to environmental threats and opportunities by making alternative strategic choices. The proponents of this theory surmise that power holders are mandated to provide strategic direction (Child, 1997). Strategic Choice Theory (SCT) argues that organizations should match their internal capabilities with the external opportunities to create competitiveness (Abdullahi, Shamsudin, Sharifuddin & Ali, 2021). Before SCT, organizational operations were thought to be dictated by the external environment and nature of manufacturing (Harney, 2016). Strategic Choice Theory provided an alternative to this view which saw individuals and groups within organizations as having the power to make choices which would have dynamic influence on the development of the organization.

The sustainable performance of an organization is dictated by its choice of business strategies. Competitive strategies enable organizations to respond to external opportunities and threats, internal strengths and weaknesses to achieve competitive advantage. The strategic choice of an organization determines its performance. Junqueira, Dutra, Zanquetto Filho and Gonzaga (2016) reinforces the view that organizational structure should follow strategy and suggests that the choice of a particular strategy should be accompanied by adjustments in the organizational structure. Nyangweso (2018) concludes that institutions adopt various strategies to achieve sustainable performance. The choice of diversification gave private universities diverse programs/services which enabled them to maintain sustainable performance, both financial and non-financial. SCT explained the dependent variable, organizational performance.

#### **Conceptual Framework**

Conceptual framework is a schematic diagram that shows the relationship between variables (Mugenda & Mugenda, 2003). The current research is anchored on as vertical diversification as an independent variable while sustainable organizational performance of private universities in Kenya as dependent variable as shown in Figure 1.0.

#### Vertical diversification

- 1. Full integration
- 2. Backward/forward integration
- 3. Level s of vertical diversity

#### Independent Variable

#### **Dependent variable**

1. First Degree Graduation

2. Student enrollment

Sustainable

performance

Rates

3. Surplus

#### **Figure 1: Conceptual Framework**

#### Empirical Literature

Martinez-Campilo (2019) built on the agency-stewardship approach to examine the benefits of related and unrelated diversification strategies on leadership style, using 183 Spanish organizations. Survey method was adopted for the study and Chi-square was used test the representativeness of the sample with regards to principal business and organization size. ROA was used to measure performance while a Likert scale was used to measure the level of organization's vertical diversification strategy. The result provided an insight on

organizational

the relevance of CEOs leadership style in the provision of the right fit for organizations pursuing growth and sustainable growth through vertical diversification.

Asrahaghighi et al., (2018) in their qualitative study on vertical diversification strategy and organization performance, result, measures and sampling design revealed that an inconclusive relationship exist between both variables judging by their measures, sampling design and data analysis. That is, the research findings depicted varying perspective, thus, the researchers concluded that though vertical diversification could increase profitability, vertical diversification could be too risk that sometimes its cost outweighs the benefits. Thus, more research on the relatedness of vertical diversification strategy to sustainable performance is needed since existing findings shows inconclusive (liner, nonlinear, curvilinear) relationships.

Oloda (2017) carried out a study on the effect of vertical integration on organizational survival in selected manufacturing firms in Nigeria. The study's sample size was 205 managers who were selected from six firms. Both primary and secondary data was used. To test the relationship between the variables reviewed the Spearman Rank-order correlation coefficient was used. The findings of the study established a positive and significant relationship between the dimensions of vertical integration (both forward and backward) and organizational survival. Conclusion from this study is that vertical integration enhances organizational survival.

Egessa (2017) studied the effect of vertical diversification on organizational competitiveness, in Mumias Sugar Company, Kenya. The study adopted descriptive correlational survey design and this being a census study; all the sugar firms in the Kenya were studied. Using a questionnaire, primary data was collected from the production and marketing managers as key informants of each of the sugar firms. Secondary data was extracted from annual reports, publications and documentary analysis. In order to test the hypothesis, the aggregate mean score of firm Competitiveness measures were regressed against the mean score of measures of Vertical Diversification. The regression results reveal that vertical diversification had overall significant positive relationship with the competitiveness of sugar firms. The regression results also showed that 46.4 percent of the sugar firm competitiveness can be explained by vertical diversification. However, the study was based in sugar manufacturing firm, and not universities, thus need for further research so as to compare empirical findings.

A study by Kimani et al. (2016) that adopted descriptive analysis for its individual research indicators and correlation and regression analysis to establish the effect of vertical, horizontal and diagonal integration on competitive performance. The findings revealed that vertical and horizontal integration contributed significantly to the competitive performance of the firms while diagonal integration was found to be insignificant. Its regression analysis also revealed that 74% of change in competitive performance of firms was attributed to collective use of the integration strategies.

#### **Research Methodology**

The current research adopted a post-positivism philosophy which is an advancement of positivism philosophy. Positivism advocates the application of methods of the natural sciences to the study of social reality and beyond (Clark, Foster, Bryman & Sloan, 2021). The current study adopted descriptive research design. Descriptive research design was found to be appropriate for the current as it has been used by other researchers. Further, the design produces statistical findings that may inform policy. The study population constituted all the 36 private universities in Kenya.

The target population of this study was 1444 top and middle level management team of private universities in Kenya who include Vice chancellors, Deputy Vice Chancellors, Registrars, Finance managers, Human Resource Managers Deans, Directors, HoDs and senior lecturers. The study adopted stratified sampling technique. The study sample size was determined using Taro Yamane's proportional sampling technique. From the calculation 313 was used for this study as sample size where respondents were selected through proportionate stratified sampling. The current research adopted questionnaires to collect primary data. The questionnaire included a 5-point Likert-type scale operationalized to reflect the study variables. Use of Likert scale enables respondents to provide information which is quantifiable. Out of these 246 questionnaires were successfully filled and handed back to the researcher which gives a 79% response rate. A pilot study was undertaken for the purpose of pre-testing the data collection instruments for reliability and validity. The study employed Cronbach's Alpha coefficient analysis assess how reliable this scale was; a coefficient of 0.7 was adopted as the minimum threshold for deciding on the sufficiency of the reliability of the study scale (Kendell & Jablensky, 2003). Sustainable organizational performance yielded an alpha of 0.879 and vertical diversification record an alpha of 0.831 which were above 0.7. The value of KMO for all the variables (constructs) were above a minimum threshold of 0.5; Sustainable organizational performance = 0.803 and Horizontal diversification = 0.789. This indicates that the number of items for each construct (variable) were adequate to measure the respective variables. Factor loadings for all the six items under Sustainable organizational performance and five items under Vertical diversification were above a minimum threshold of 0.4.

The data analysis included a variety of methodologies due to the study's inclusion of both qualitative and quantitative elements. The quantitative data was examined using the Statistical Package for Social Sciences (SPSS) and Microsoft Excel software, specifically via the use of descriptive statistics. Descriptive statistics use measurements of central tendency (such as mean), measures of dispersion (such as standard deviation), and inferential statistics (such as correlation and linear regression) to display data. The research used regression and correlation analysis to demonstrate the impact of a specific collection of factors on an independent variable, as well as to assess the robustness of the association between them.

## The Findings and Discussions of the Study

#### Descriptive Statistics of Variables in the Study

Descriptive statistics are used to define and describe the properties of a set of data (Mboya, 2019). The study did seek to interrogate whether vertical diversification strategy influences the Sustainable organizational performance of chartered private universities in Kenya. To describe a distribution of the scores of measurements using indices or statistics the study entailed use of descriptive statistics to present findings using percentages, frequencies, means and standard deviation. To determine the influence of Diversification strategy on Sustainable organizational performance of chartered private universities in Kenya, the researcher sought to find information regarding the sustainable organizational performance in regards to the following indicators first degree graduation rates, student enrollment and surplus. The results are as shown in Table 1

#### Table 1.0: Sustainable organizational performance

1-Very little extent, 2-Little extent, 3-Moderate Extent, 4-Great Extent, 5-Very Great Extent, S.D-Standard Deviation

<b>Organizational Performance</b>	5	4	3	2	1	Mean	<b>S. D</b>
The university has high student	21.1%	33.3%	35%	6.5%	4.1%	3.61	1.02
enrollment	(52)	(82)	(86)	(16)	(10)		
Unique skills offered by the	6.5%	14.6%	35%	38.2%	5.7%	2.78	0.99
university have increased the	(16)	(36)	(86)	(94)	(14)		
employability of our students							
The university has a high graduation	11.4%	44.7%	23.6%	16.3%	4.1%	3.43	1.02
rate of students.	(28)	(110)	(58)	(40)	(10)		
High number of student enrollment	17.9%	49.6%	17.9%	13.8%	0.8%	3.70	0.95
has increased university revenue	(44)	(122)	(44)	(34)	(2)		
from student fees							
Unique programs offered by the	22%	22%	34.1%	17.9%	4.1%	3.40	1.13
university have attracted new	(54)	(54)	(84)	(44)	(10)		
students							

The university	offers unique		24.4%	35.8%	17.9%	4.1%	3.34	1.09	
competitive programs which has		(44)	(60)	(88)	(44)	(10)			
increases student en	rollment								
Average level of Mean(%Mean)		Std	Std. Dev.		Std. Error of		Max	Maximum	
Organizational	· · · ·			mean		m			

According to Table 1.0, 21.1% of the 246 respondents said that the institution has a high student enrollment to a significant degree, while an additional 33.3% evaluated it to a great degree. Conversely, 35% of the participants said that the institution has a significant number of students to a moderate degree, while 6.5% indicated a little degree, and 4.1% indicated a very small degree. The mean of 3.61 suggests that the university has a high level of student enrollment to a large degree. However, the standard deviation of 1.02 indicates that there is substantial variance, with some institutions having a high level of student enrollment and others having a moderate level.

The university's provision of distinctive talents has enhanced the employability of our students. 6.5% of the participants said that the university's distinct talents have significantly enhanced the employability of our students, while 14.6% stated that it has done so to a very significant degree. In contrast, 35% of the 246 participants said that the university's distinctive talents had somewhat enhanced the employability of our students, while 38.2% reported a little enhancement and 5.7% reported a very slight enhancement. The university's unique skills have moderately increased the employability of their students, as indicated by a mean of 2.78. However, there is significant variation in the employability of students across universities, ranging from little to great extent, as shown by a standard deviation of 0.99.

The findings also showed that 11.4% of the 246 participants said that the institution has a very high graduation rate, while 44.7% reported that it has a considerably high graduation rate. Among the 246 respondents, 23.6% said that the institution has a high graduation rate to a moderate degree, while 16.3% expressed it to a lesser degree, and 4.1% expressed it to a very minimal degree. The institution has a mean graduation rate of 3.43, indicating a high overall rate. However, the standard deviation of 1.02 suggests that certain universities have lower graduation rates, with a range from little to significant.

In addition, the findings showed that 17.9% of the 246 participants reported a significant rise in university income from student fees due to a high number of student enrollments, while 49.6% of the participants said that the increase was even more substantial. Conversely, 17.9% of the participants said that a high number of student enrollments has somewhat improved university income from student fees. Additionally, 13.8% reported a little rise, while just 0.8% reported a very minimal gain. The mean of 3.70 suggests that there has been a large rise in university income from student fees due to a high number of student enrollments. This is further reinforced by the negligible standard deviation of 0.95. The standard deviation indicates that the rise in income from student fees due to student enrollment varied from a modest degree to a significant degree.

Nevertheless, 22% of the 246 participants disclosed that the university's distinctive offerings had significantly and greatly enticed new students. Conversely, out of the 246 participants, 34.1% said that the university's distinctive programs had somewhat attracted new students. Additionally, 17.9% reported a little level of attraction, while 4.1% reported a very small extent. The mean of 3.40 indicates that the university's unique programs have successfully attracted new students. The standard deviation of 1.13 suggests that there is significant variation in the extent to which different universities attract new students through their unique programs. Some universities attract new students to a small extent, while others attract them to a great extent.

Finally, the findings showed that 17.9% of the 246 participants said that the institution provides distinctive and competitive programs, resulting in a significant rise in student enrollment. Additionally, 24.4% of the respondents reported that this increase was of utmost magnitude. On the other hand, 35.8% of the

respondents indicated the university offers unique competitive programs which has increases student enrollment at moderate extent, 17.9% at little extent and 4.1% at very little extent. The university's mean of 3.34 suggests that it provides distinctive and competitive programs, resulting in a modest growth in student enrollment. This is further reinforced by a substantial standard deviation of 1.09. The significant deviation suggested that there was deviation in regards to increase student enrollment as some universities realized increased enrollment at little extent due to offering university offers unique competitive programs while other at very great extent.

Universities now face a more intense level of competition within their operating environment. Consequently, private colleges must strategically position themselves in order to attain sustained performance. Establishing a sustainable performance in universities can be a significant hurdle due to the intricate governance structure, which may resemble a 'organized anarchy'. This structure is marked by government priorities and temporary factors, a vague or unclear utilization of technology, and an ambiguous institutional culture.

Sustainable organizational performance in private universities refers to the capacity to effectively maintain and support the functioning of these institutions. This is achieved by improving academic programs, the learning environment, and the curriculum. These aspects play a crucial role in imparting knowledge, values, and skills to students, enabling them to successfully face future challenges (Ekpoh & Okpa, 2017). The ability of private universities to attract more students and increase their market share depends on their reputation, the quality of their output and stakeholder satisfaction. Zangoueinezhad and Moshabaki (2011) support the view that in assessing sustainability, consideration should be made to the contribution of teaching and research to the achievement of the university strategic goal.

Compared to public universities, it can be expected that private universities are more flexible and react more quickly to demands from external stakeholders. A reason for this is that they rely on students paying for their studies, which makes them more vulnerable to demographic changes and changes in funding for their day-to-day operations. The impact on teaching and sustainability practices may differ, depending on the requirements from the labour market. In particular, private business schools aim to deliver students ready for functioning in the current economic system and to fulfil the requirements of the large employers (Platje et al., 2019).

# Table 2.0: Vertical Diversification

1-Very little extent, 2-Little extent, 3-Moderate Extent, 4-Great Extent, 5-Very Great Extent, S.D-Standard Deviation

Statements on Vertical diversification	5	4	3	2	1	Mean	S.D
adopted by Private Universities							
The university has upgraded existing	22%	37.4%	19.5%	18.7%	2.4%	3.58	1.10
programs to attract new students	(54)	(92)	(48)	(46)	(6)		
The university has increased the number of	4.9%	51.2%	27.6%	13.8%	2.4%	3.42	0.88
academic programs to increase student	(12)	(126)	(68)	(34)	(6)		
numbers							
The university has diversified academic	9.8%	51.2%	29.3%	5.7%	4.1%	3.57	0.90
programs to attract new students and retain	(24)	(126)	(72)	(14)	(10)		
old students							
The university has established academic	11.4%	50.4%	22%	13.8%	2.4%	3.54	0.95
programs based on industry needs in order	(28)	(124)	(54)	(34)	(6)		
to attract more students							
The university has fully integrated old and	13.8%	42.3%	31.7%	9.8%	2.4%	3.55	0.93
new study programs which has enhanced	(34)	(104)	(78)	(24)	(6)		
student enrollment							
Average level of Mean(%Mean) St	d. Dev.	Std. H	Error of	Minim	um	Maxin	num
Vertical		mean					

diversification 3.5 (70.0%)	.73653	.04696	1.0	5.00
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As shown in Table 2, 22% of the 246 respondents revealed that the university has upgraded existing programs to attract new students to a very great extent. On the other hand, 19.5% of the respondents revealed that the university has upgraded existing programs to attract new students at moderate extent while 18.7% at little extent and 2.4% at very little extent. A mean of 3.58 indicated that the university has upgraded existing programs to attract new students at great extent although a standard deviation of 1.10 implied that there was significant variation in regards to upgrading existing programs to attract new students as some universities upgraded existing programs to little extent while some university upgraded existing programs to very great extent.

In regards to their university has increased the number of academic programs to increase student numbers, 4.9% of the respondents indicated that their university has increased the number of academic programs to increase student numbers at great extent and 51.2% indicated at very great extent. Conversely, 27.6% of the 246 respondents revealed the university has increased the number of academic programs to increase student numbers at moderate extent while 13.8% at little extent and 2.4% at very little extent. A mean of 3.42 revealed the university has increased the number of academic programs to increase student numbers at great extent with some significant variation among the responses of 0.88. This implies that some universities increased the number of academic programs to great extent while other at moderate extent.

The results also revealed that 9.8% of the 246 respondents indicated that the university has diversified academic programs to attract new students and retain old students at very great extent while 51.2% indicated it was at great extent. However, 29.3% of the 246 respondents indicated the university has diversified academic programs to attract new students and retain old students at moderate extent while 5.7% indicated at little extent and 4.1% at very little extent. A mean of 3.57 revealed that their university has diversified academic programs to attract new students and retain old students although from the standard deviation, 0.90, some of the universities have not diversified academic programs to attract new students. The extent generally stretched from little extent to great extent.

Further, the results revealed that 11.4% of the 246 respondents indicated the university has established academic programs based on industry needs in order to attract more students at great extent while 50.4% of the respondents indicated that it was at very great extent. On the other hand, 22% of the respondents indicated the university has established academic programs based on industry needs in order to attract more students at moderate extent, 13.8% at little extent and 2.4% at very little extent. A mean of 3.54 indicated that the universities have established academic programs based on industry needs in order to attract more students and this was supported by significant standard deviation of 0.95. This implies that some universities have established academic programs based on industry needs at little extent while other universities have done the same at great extent.

Lastly 13.8% of the 246 respondents revealed that the university has fully integrated old and new study programs which has enhanced student enrollment at very great extent and 42.3% at great extent. On the other hand, 31.3% of the 246 respondents revealed that the university has fully integrated old and new study programs which has enhanced student enrollment at moderate extent, 9.8% at little extent and 2.4% at very little extent. A mean of 3.55 revealed that the universities have fully integrated old and new study programs which has enhanced student enrollment at moderate with a significant standard deviation of 0.93. This implied that there is wide deviation in responses as some used integrated old and new study programs at little extent while others at great extent across the mean.

Linear Regression between Entrepreneurial networking practice and Performance

The study sought to establish the significance of the causal and effect relationship between Vertical diversification and Sustainable organizational performance of chartered private universities in Kenya. The hypothesis was:

 $H_0$ : Vertical diversification does not significantly influence sustainable organizational performance of chartered private universities in Kenya.

# Table 3: Linear Regression analysis between Vertical diversification and Sustainable organizational performance

				Mode	el Summ	ary						
Mo	Model R R Sq			uare	Adjusted R		Std. Error of the Estimate					
					Squar	re						
1		.706 <sup>a</sup>		.499	.4	97		.57925				
	a. Predicte	ors: (Const	ant), Vertical	diversifica	tion							
	b. Depend	ent Variab	le: Sustainabl	e organizat	tional per	forn	nance					
				A	NOVA <sup>a</sup>							
Mo	del		Sum of Squa	res	Df	N	Iean Square	F		Sig.		
1	Regression		81	.554	1		81.554	243.054	.000 <sup>b</sup>			
	Residual		81	.872	244		.336					
	Total		163	.426	245							
a. L	Dependent V	ariable: Su	stainable orgo	anizational	perform	ance						
<i>b. P</i>	Predictors: (	Constant),	Vertical diver	sification								
				Co	efficients	a						
Model		Unstanda Coefficie			Standardized Coefficients	t		Sig.				
				β	Std. Erro		Beta					
1	(Constant)			.609	.1	81			3.358	.001		
	Vertical div	versification	ı	.783	.0	50	.706	1:	5.590	.000		
a. L	Dependent V	ariable: Su	stainable orgo	anizational	perform	ance						

The correlation coefficient (R) for vertical diversification was 0.702, P=0.000, suggesting that there is significant positive relationship between vertical diversification and sustainable organizational performance of chartered private universities in Kenya. This implies that increase in vertical diversification would results to significant increase in sustainable organizational performance of chartered private universities in Kenya. The results are supported by Oloda (2017) who established a positive and significant relationship between the dimensions of vertical integration (both forward and backward) and organizational survival. Conclusion from this study is that vertical integration enhances organizational survival. However, Asrahaghighi et al., (2018) research findings depicted that though vertical diversification could increase profitability, vertical diversification could be too risk that sometimes its cost outweighs the benefits

The ANOVA test results from above Table 3 were F (1, 244) =243.054, P = 0.000 < 0.05; an indication that the Simple Linear Regression model was a good fit to our dataset. The model (Vertical diversification) was able to explain 49.9% of the variation in the Sustainable organizational performance of chartered private universities in Kenya as indicated by the R Square = 0.499 as shown in the model summary of Table 3. The findings support the previous studies, Egessa (2017) studied the effect of vertical diversification on organizational competitiveness, in Mumias Sugar Company, Kenya. A study by Kimani et al. (2016) that adopted descriptive analysis for its individual research indicators and correlation and regression analysis to establish the effect of vertical, horizontal and diagonal integration on competitive performance. The findings revealed that vertical and horizontal integration contributed significantly to the competitive performance of the firms while diagonal integration was found to be insignificant.

The regression Coefficient results showed that  $\beta$ = 0.783, t =15.590, p=0.000<0.05; therefore, vertical diversification had a statistically significant influence on the Sustainable organizational performance of

chartered private universities in Kenya. This implies that Sustainable organizational performance of chartered private universities in Kenya. Vertical diversification had a positive standardized beta coefficient = 0.783 as shown in the coefficients results of Table 3; this indicates that Sustainable organizational performance is predicated to improve by 0.783 when the vertical diversification practice variable goes up by one unit. To predict the Sustainable organizational performance of chartered private universities in Kenya when given the level of Vertical diversification, the study suggests the use of the following model;

# Sustainable organizational performance = 0.609 + 0.783 Vertical diversification

Martinez-Campilo (2019) built on the agency-stewardship approach to examine the benefits of related and unrelated diversification strategies on leadership style, using 183 Spanish organizations. The result provided an insight on the relevance of CEOs leadership style in the provision of the right fit for organizations pursuing growth and sustainable growth through vertical diversification. Asrahaghighi et al., (2018) in their qualitative study on vertical diversification strategy and organization performance. That is, the research findings depicted varying perspective, thus, the researchers concluded that though vertical diversification could increase profitability, vertical diversification could be too risk that sometimes its cost outweighs the benefits. Oloda (2017) carried out a study on the effect of vertical integration on organizational survival in selected manufacturing firms in Nigeria. The findings of the study established a positive and significant relationship between the dimensions of vertical integration (both forward and backward) and organizational survival.

#### **Conclusions and Recommendations**

The study concluded that vertical diversification does significantly influence sustainable organizational performance of chartered private universities in Kenya hence, the second null hypothesis was rejected. This implied that increase in full integration backward/forward integration and level s of vertical diversity would result to improvement in first degree graduation rates, student enrollment and surplus. This was illustrated by majority of universities upgrading existing programs to attract new students and diversifying academic programs to attract new students and retain old students.

Policymakers should consider formulating and implementing policies that encourage and support vertical diversification in chartered private universities in Kenya. These policies should incentivize universities to upgrade existing programs, diversify academic offerings, and establish programs aligned with industry needs. Additionally, policymakers could introduce measures to facilitate full integration of old and new study programs, enhancing student enrollment. A policy framework that recognizes and rewards universities for effective vertical diversification strategies will contribute to the overall sustainability and performance of the private university sector in Kenya.

Private universities should strategically embrace vertical diversification practices to enhance sustainable organizational performance. This involves continuous efforts to upgrade existing programs, diversify academic offerings, and establish programs that meet the evolving needs of industries. Full integration of study programs, coupled with a focus on increasing the number of academic programs, can contribute to improved student enrollment. Collaboration with industries and stakeholders to identify skill gaps and industry requirements is essential. Universities should invest in infrastructure and faculty development to support the implementation of diverse academic programs.

Researchers and scholars in higher education management should advance theoretical frameworks to deepen the understanding of the relationship between vertical diversification and sustainable organizational performance in private universities. Exploring the nuances of how different dimensions of vertical diversification impact performance can contribute to theoretical advancements. Researchers should also investigate the moderating role of contextual factors and external influences on the effectiveness of vertical diversification strategies. Theoretical insights generated from such studies will provide a foundation for evidence-based decision-making and strategic planning in the dynamic landscape of private higher education institutions.

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