



## Strategic choices of public universities in a competitive liberalised higher education. A case of the University of Zambia

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### Abstract

This study sought to establish the implementation of strategic choices of public universities in a competitive liberalised higher education. A descriptive research design and study sample size of 75 people was used in the study guided by Glenn Israel formula from the study population of 300 persons. The research used self-administered questionnaires and structured interview to collect data. Content analysis and Statistical Packages for Social Sciences were employed in the analysis of data. The findings revealed that competition that emerged from liberalised higher education played a critical role in influencing strategic choices the University of Zambia undertook in order to maintain a competitive advantage over others (Chi-Square test of goodness of fit=29.55, df = 9 & Asymp. Sig = 0.001). The findings further revealed that UNZA in its strategic choices instituted strategic measures to generate own financial resources to meet all operational costs. These strategic measures included but not limited to increase enrolment of students, introduce new market driven degree programmes, charge cost reflective tuition fees and invest in infrastructure development. The findings also indicated that in order to remain competitive, UNZA embarked on strategic responses such as growth strategy, product differentiation strategy and price-skimming strategy. The study recommended the University of Zambia should, invest in Communication and Marketing, use ICT innovations in higher education service delivery and invest in physical and virtual infrastructure. For the University to remain financially viable, it was recommended that the University Management should employ strategic planning and strict budget controls besides others.

**Keywords:** strategic choices, competitive liberalised higher education

### 1. Introduction

At independence, Zambia had about 100 people with degrees from universities outside the country (Sanyal *et al.*, 1976) <sup>[13]</sup>. This situation posed a challenge for a newly independent Zambia with a mammoth task of developing its own trained human resources to take over the mantle of leadership from the colonial regime. To this effect, the new Government of the Republic of Zambia embarked on formulating various education policies which were aimed at improving education system from primary level through to higher education levels. Thus, the University of Zambia was established in 1965 by an Act of Parliament called the University of Zambia Act No. 66 of 1965 but became operational on 17<sup>th</sup> March 1966 as a sole public university for the people of Zambia and beyond. In 1966, the University started with only three (3) Schools namely, Education, Humanities and Social Sciences, and Natural Sciences with 312 students (The University of Zambia Strategic Plan 2018 – 2022, 2018) <sup>[18]</sup>. By 2016, the University of Zambia has grown from three schools to 13 schools. Additionally, the University of Zambia Act of 1965 underwent several reviews and amendments which led to the establishment of Copperbelt University under the University Act of 1987. In 2008, University Act of 1987 was amended to facilitate the transformation of the National College for Management and Development Studies in Kabwe into another university now called Mulungushi University (Manyukwe, 2008) <sup>[11]</sup>. Furthermore, in 2013, this Act was repealed and replaced by the Higher Education Act No. 4 of 2013 which

has liberalised the higher education sector in Zambia to allow for the establishment of more public and private universities in the country (The University of Zambia Strategic Plan 2013 – 2017, 2012) <sup>[17]</sup>. Currently, the Government of the Republic of Zambia has constructed more public universities such as Kapasa Makasa University in Chinsali district and Mukuba University in Kitwe. Some public colleges have been upgraded to public universities like Kwame Nkrumah University in Kabwe and Chalimbana University in Chongwe. Recently, Government has made commitment to construct of more universities. Kuyela (2016) <sup>[10]</sup> reports that Paul Mushindo University in Muchinga province, King Lewanika University at Namushakende in Western Province and Luapula University in Mansa are some of the higher learning institutions that are under construction. On the other hand, by 2016, there are over 60 private universities registered with the Higher Education Authority in Zambia, providing higher education in various disciplines such as health, education, law, and business (Higher Education Authority, 2017) <sup>[6]</sup>. This scenario entails that the oldest public universities, such as the University of Zambia, should begin to strategically position themselves through developing strategic directional approaches and making strategic choices so as to rise up to the new challenges posed by a liberalisation of the higher education sector. Consequently, there has been an increasing need for public universities, especially those that have enjoyed Govt. funding, to begin managing their costs and find alternative sources of funds in the wake of apparent dwindling state funding.

### 1.1 Statement of the Problem

Thole (2012) [19], observed that in the recent past, the term “University” in Zambia was synonymous with “the University of Zambia” but the scenario had now changed as more players had come “in the field to play the game of providing higher education”. Simply stated, competition in providing higher education was now a reality. The major concern is: How would the competitive liberalised higher education environment affect the long-established public universities such as the University of Zambia in their formulation of strategies and making strategic choices on how to remain viable and efficient in the face of competition from private and new public universities?

### 1.2 Specific Objectives

1. To establish the University of Zambia’s strategic choices to cope with competition from other public and private universities.
2. To identify the University’s strategic measures to generate own financial resources to meet all operational costs.
3. To assess the University’s strategic responses to emerging higher education environmental challenges.

### 1.3 Significance of Study

The findings of this research could assist managers of public universities to take strategic approaches in the delivery of quality higher education. In view of the competitive higher education, the long-established universities, such as the University of Zambia, could use the findings to strategically reposition themselves in order to develop a competitive

advantage over new private and public universities through use of their economies of scale. Besides, the findings of this study would stimulate readers and other researchers to conduct similar studies on a larger scale with more focus on private universities. Additionally, the findings of this research could be used in policy reforms and development of legal framework in higher education sector in Zambia with a view to improving higher education quality and standards. The study could provide a baseline for policy formulation on Government funding of public universities.

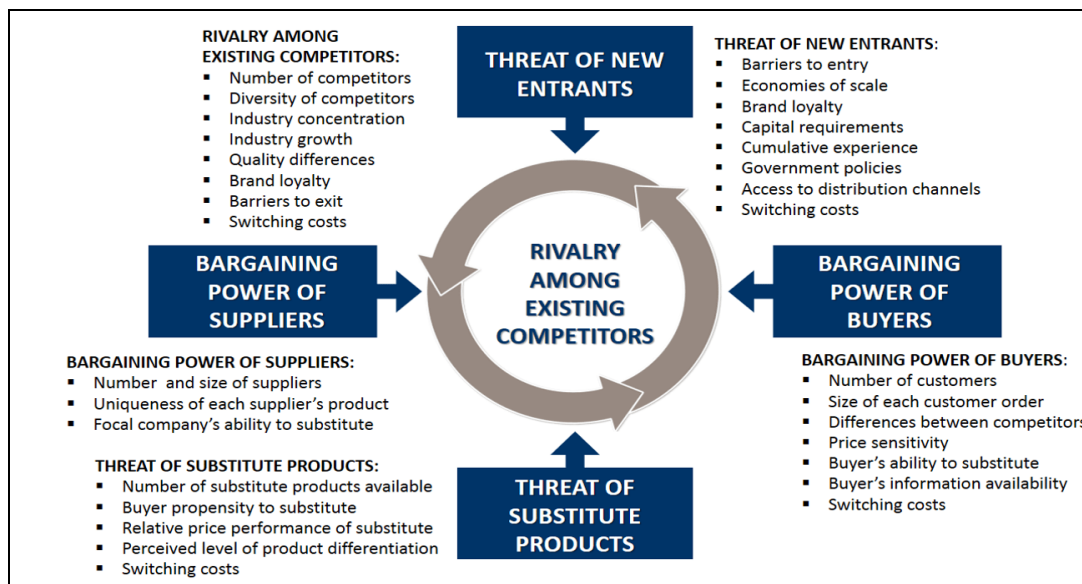
### 1.4 Theoretical Framework

Strategic Management Process theories indicate that strategic management is a systematic approach to strategy formulation that is based on the mission, or purpose, of an institution (university) which tests the implementation of choices and actions of an organisation against that mission.

#### 1.4.1 Michael E. Porter’s Five Competitive Forces

According to Dälken (2014) [2], the Michael Porter’s Five Forces model (developed in the late 1970s) is a modest but powerful tool for identifying where power lies in a certain business industry by using the outside-in approach. The model identifies five forces in the micro-environment that drive competition which threaten a business’s ability to make profit. The derivation of the Five Forces framework of Porter is the industrial economics approach. The idea is that the attractiveness of market and its overall profitability can mainly be defined by the market structure.

### Porter’s Five Competitive Forces



Source: <https://www.google.com/>

Fig 1

### 1.5 Hypothesis

#### Hypothesis 1

**Null Hypothesis Ho:** Competition as a result of liberalised higher education does not play a critical role in influencing strategic choices through situational analysis so as to maintain

a competitive advantage over others.

**Alternative Hypothesis H<sub>1</sub>:** Competition as a result of liberalised higher education plays a critical role in influencing strategic choices through situational analysis so as to maintain a competitive advantage over others.

**Hypothesis 2**

**Null Hypothesis Ho:** The University does not need strategic measures to generate own financial resources to meet all operational costs

**Alternative Hypothesis H1:** The University needs strategic measures to generate own financial resources to meet all operational costs.

**Hypothesis 3**

**Null Hypothesis Ho:** strategic responses are not important for

UNZA to cope with emerging higher education environmental challenges.

**Alternative Hypothesis H1:** strategic responses are important for UNZA to cope with emerging higher education environmental challenges

**2. Literature review**

This chapter reviewed scholarly works relevant to the study as summarised below:

**Table 1**

Author's Name	Title	Main Findings	Gap
Berchin, (2017) [11]	Strategies to promote sustainability in higher education institutions: A case study of a federal institute of higher education in Brazil	Issues of sustainability, brought about by the Brazilian federal legislature, prompted federal (public) higher education institutions change their internal processes, infrastructure and organisational culture toward sustainability.	This paper is more focused on sustainability in higher education by reporting on the process of implementation of a sustainability plan. However, it overlooked the importance of holistic, strategic approaches to address issues such as infrastructure, standards of higher education, customer service etc.
Teferra, (2013) [16]	Funding Higher Education in Africa: State, Trends and Perspectives	With increasingly growing interest in Africa, the universities need to carve their competitive niche proactively so as to generate resources as well as consolidate research and teaching	Focus of the study is on finding alternative sources of funding for higher education institutions in Africa without outlining the strategic choices that needed to be undertaken.
Fethke, (2013) [4]	Public no more universities: subsidy to self-reliance	That a hybrid model of business and academic practices can provide a meaningful path for public universities to sustain excellence in a period of declining subsidy.	The study did not provide the strategic approach of how this hybrid model of business and academic practices would be implemented in public universities
Gomes (2009) [5]	"Benchmarking competitive methods and strategic choices of Portuguese SMEs: Traditional practices and new realities"	Findings appear to indicate that the sampled organisations are following hybrid strategic orientations. These strategic orientations appear to be motivated by well-defined mixed strategies. The strategic elements of e-business are detected in these mixed strategies.	It is very difficult to relate the hybrid strategic orientation practiced by the studied Portuguese manufacturing organisations to the classical Porter's framework. The hybrid generic strategies tended to emphasise competitive methods almost equally, it is difficult to establish clear strategic orientations.

**3. Research design**

This research used the descriptive survey design was used with a study samples of 75 respondents from a population of 300 participants. In collecting data, both a structured questionnaires and interviews were used. The questionnaires was hand-delivered and the interviews was conducted when collecting the questionnaires. Additionally, data was also collected from a detailed literature review in order to obtain a trend or pattern on the research topic. The researcher first had the proposal approved by the supervisor. Thereafter, the questionnaires and interview questions were developed and approved by the supervisor. Then an introductory letter from the Institute of Distance Education was obtained to start collecting data. Additionally, Ethical clearance was obtained from the UNZA Ethics Clearance Committee. Since the respondents were the University of Zambia staff, permission was sought from the Office of Registrar. Then the questionnaires were personally delivered to selected respondents by hand while the interviews were done when collecting answered questionnaires.

In data analysis, Statistical Package for Social Sciences (SPSS) software was employed as it is useful in analysing small samples, predicting trends, and develop forecasts quickly and easily. For ethical considerations, informed

consent, confidentiality and anonymity as well as privacy of participants were strictly followed during data collection.

**4. Presentation and discussions of research findings**

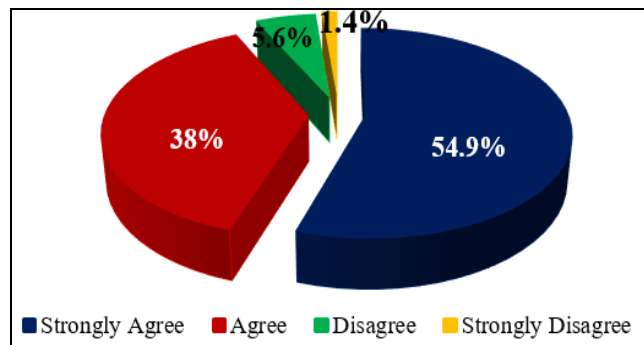
In total, 75 questionnaires were administered and evenly distributed to the selected respondents at the Great East Road and Ridgeway campuses of the University of Zambia. From these questionnaires, 73 were collected and two were not. This represented a collection efficiency of 97%. The similar number of respondents were also interviewed as the questionnaires were collected.

**4.1 Is UNZA Facing Competition**

**Table 2:** UNZA facing competition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	39	53.4	54.9	54.9
	Agree	27	37.0	38.0	93.0
	Disagree	4	5.5	5.6	98.6
	Strongly disagree	1	1.4	1.4	100.0
	Total	71	97.3	100.0	
Missing	System	2	2.7		
	Total	73	100.0		

Source: Field Data 2018



Source: Field Data 2018

Fig 2: UNZA Facing Competition?

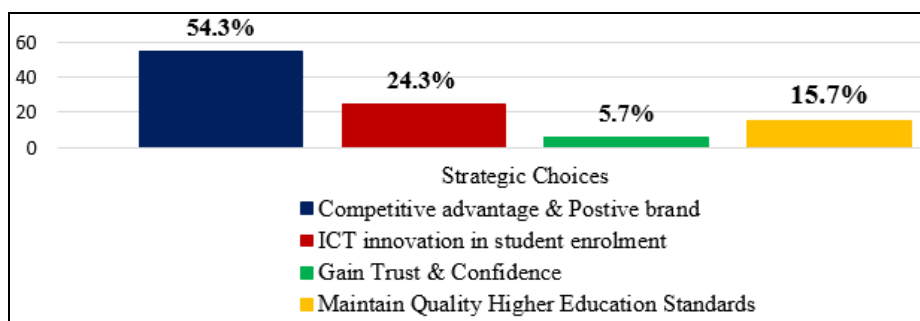
It is vividly clearly that the respondents appreciated the fact that the University of Zambia is facing competition as a result of the liberalised higher education sector in Zambia. The combined percentage of 92.9% (strongly agree, 54.9% and agree, 38%) shows that the respondents understand the competitive nature of the liberalised higher education sector in the country as indicated by Table 2 and Fig 2. This point has been highlighted by Taatila (2017) [15] who noted that increased competition through enhanced globalisation has transformed the field of higher education deeply. It concurrently faces demands to produce a higher level of competence, shorten implementation periods and with an increasing number of participants with fewer resources.

### 4.2 Strategic Choices to Cope with Competition

Table 3: UNZA Strategic Choices to cope with competition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	develop competitive advantage and a positive brand	38	52.1	54.3	54.3
	ICT innovations will enable UNZA enrol more students and increase revenue base	17	23.3	24.3	78.6
	gain trust and confidence	4	5.5	5.7	84.3
	maintain quality higher education standards	11	15.1	15.7	100.0
	Total	70	95.9	100.0	
Missing	System	3	4.1		
Total		73	100.0		

Source: Field Data 2018



Source: Field Data 2018

Fig 3: Strategic Choices to cope with Competition

Table 3 and Clustered Figure 3 shows how participants in this study felt on what strategic choices the University of Zambia should take in order to cope with a competitive liberalised higher education sector in Zambia. It shows that 54.3% respondents contended that developing a competitive advantage and a positive brand would assist the University cope well with competition. These were followed by 24.3% participants of the study who felt that the use of ICT innovations in student enrolment would significantly enhance the position of the University in the higher education sector in

the country. And maintaining quality higher education standards 15.7% comes in third position.

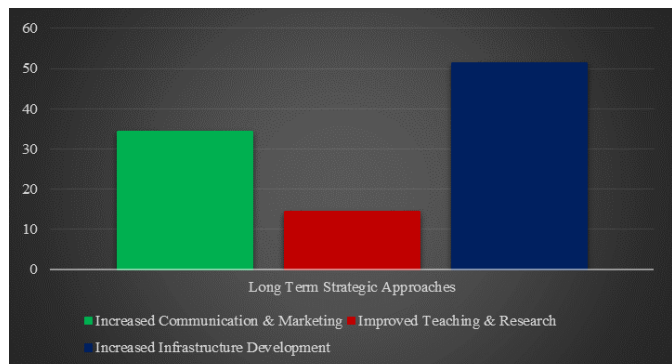
In fact, Durkin (2012) [3] argues that the concept of marketing has gained significant attention in universities across the world from the 1980s onwards. The remarkable increase in higher education competition stressed a need for universities to develop more distinct brand identities. This situation has led universities to strategically begin employing marketing principles in a bid to attract and retain students both in the local and international markets.

### 4.3 Long term Strategic Approaches

Table 4: Long Term Strategic Approaches to Address Challenges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	increased communication and marketing	24	32.9	34.3	34.3
	improved teaching and research	10	13.7	14.3	48.6
	increased infrastructure development	36	49.3	51.4	100.0
	Total	70	95.9	100.0	
Missing	System	3	4.1		
Total		73	100.0		

Source: Field Data 2018



Source: Field Data 2018

Fig 4: Long Term Strategic Approaches

In terms of long term strategic approaches to address challenges brought about by a competitive liberalised higher education, respondents put emphasis on increased infrastructure development (51.4%). Infrastructure

#### 4.4 Possible Strategies to address emerging challenges

Table 5: Strategies UNZA can use to address emerging challenges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	growth strategy	20	27.4	27.8	27.8
	product differentiation strategy	49	67.1	68.1	95.8
	price-skimming strategy	3	4.1	4.2	100.0
	Total	72	98.6	100.0	
Missing	System	1	1.4		
	Total	73	100.0		

Source: Field Data 2018



Source: Field Data 2018

Fig 5: Strategies UNZA Can Use

Among the three strategies presented to them, 68.1% of respondents favoured the Product Differentiation strategy as more applicable to the competitive liberalised higher education environment. This is due to the fact that all the players in the higher education sector are, generally, offering the same degree programmes. To set itself apart from other competitors, respondents felt that the University of Zambia should utilise the product differentiation strategy.

According to Kelchner (2018)<sup>7</sup>, product differentiation is a marketing strategy that many organisations are using to distinguish a product/service from similar offerings on the market. In product differentiation strategy, an organisation target a particular segment(s) of the market and deliver the message that the product is positively different from all other

development include the construction of lecture rooms, laboratories, research facilities, lecturers’ offices, students’ accommodation and virtual internet infrastructure. This is in order to meet the increasing demand for higher education in Zambia through onsite studies and open distance education as well as online learning. This is followed by increased communication with 34.3% of respondents recommending that as one of the key long term strategic approaches. These study findings are well documented in the University of Zambia Strategic Plan 2018 – 2022, (2017) as two of the seven (7) key Strategic Directions. These are:

- a. Strategic Direction No. 5: Invest in and maintaining physical and virtual infrastructure
- b. Strategic Direction No. 4: Enhance the University Corporate Brand

At least, there is indication of the University’s commitment to the long term strategic approaches to addressing the challenges in higher education such as competition, high university education demand and inadequate funding.

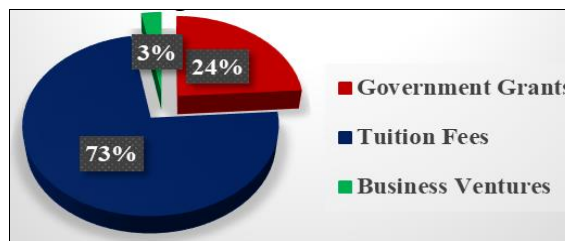
similar products available to their benefit. The main objective of this strategy is to alter customer perspective/perceptions on one product/service when compared to another, even if the actual differences are minute or entirely aesthetic such as packaging, branding, etc.

#### 4.5 Sources of Financial Resources

Table 6: UNZA Sources of Revenue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	government grants	17	23.3	23.9	23.9
	tuition fees	52	71.2	73.2	97.2
	business ventures	2	2.7	2.8	100.0
	Total	71	97.3	100.0	
Missing	System	2	2.7		
	Total	73	100.0		

Source: Field Data 2018



Source: Field Data 2018

Fig 6: Sources of Revenue

From Table 6 and Figure 6 respondent indicated that the main source of revenue for the University of Zambia was tuition fees and then followed by Government grants. This scenario was highlighted in the University of Zambia Strategic Plan

2018 – 2022 (2018:5) [18] where it was confirmed that the University obtained 59% of its revenues from tuition fees, then followed by 33% from Government grants and 8% from internal business ventures.

**4.6 Strategic Measures to Generate own Revenue**

**Table 7:** Strategic measures to generate revenue

		Responses		Percent of Cases
		N	Percent	
Measures to generate adequate revenue	Increase enrolment of students	41	17.9%	56.9%
	Introduce new degree programmes	40	17.5%	55.6%
	Charge cost reflective tuition fees	48	21.0%	66.7%
	Invest in infrastructure development (teaching, research and accommodation facilities)	57	24.9%	79.2%
	develop business ventures through subsidiary business entities	43	18.8%	59.7%
Total		229	100.0%	318.1%

Source: Field Data 2018

From Table 7, respondents felt that investment in infrastructure development (24.9%) such as teaching, research and accommodation facilities would be a more strategic measure for the University of Zambia to generate its own revenues. With increased infrastructure, the university would be able to enrol more students and introduce new degree programmes. Thus, the University would be able to meet the increasing demand for university education in the country and the region.

Secondly, the participants in the study also viewed that charging cost reflective tuition fees (21%) would assist in offsetting operational costs and meet other legal obligations. Thirdly, developing business ventures such as subsidiary business entities (18.8%) of the University of Zambia. Fourthly, respondents felt that increased student enrolment (17.9%) would assist in generating revenue through increased collection of tuition fees. Lastly, introduction of new degree programmes (17.5%) was another strategic measure. This is due to the fact that society and industry have developed special needs which could be met by new skills and knowledge. This has been brought about by technological breakthroughs, globalisation and information communication technology innovations. Universities are better placed to train such skilled and knowledgeable human capital. According to Shahidi (2012)<sup>14</sup> globalisation is a multi-dimensional phenomenon and a multi-faceted process with economic, social, political and cultural implications for higher education. It has challenged monopoly in higher education field which was dominated by government-run universities as there are new providers of university education.

**4.7 Study Data Distribution**

In this study, the Pearson Chi-Square test of goodness of fit was carried out to determine whether the distribution of data followed an observed and expected distribution.

**Table 8:** Chi-Square Test of Goodness of fit

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.710 <sup>a</sup>	6	.191
Likelihood Ratio	9.361	6	.154
Linear-by-Linear Association	2.651	1	.104
N of Valid Cases	73		

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .01.

Source: Field Data 2018

From Tables 8, the Chi-square statistic of 0.01 is less than 0.05 level of significance. This showed that the distribution of data of this study was not by chance. There is 0.01% chance of finding a discrepancy between the observed and expected distributions. This helps to understand that the attributes of the study sample were reflective of the study population.

**4.8 Hypothesis Testing: Pearson Chi-Square Test of Independence**

The Pearson Chi-square Test of Independence is a non-parametric statistical test to determine if two or more classifications of the samples are independent or not (Kostalova, 2010) [8].

**Main Hypothesis 1**

**Null Hypothesis Ho:** Competition as a result of liberalised higher education does not plays a critical role in influencing strategic choices through situational analysis so as to maintain a competitive advantage over others.

**Alternative Hypothesis H1:** Competition as a result of liberalised higher education plays a critical role in influencing strategic choices through situational analysis so as to maintain a competitive advantage over others.

The main hypothesis was tested using the Pearson Chi-Square Test of Independence to find significant evidence to either reject or fail to reject the Null Hypothesis and accept the Alternative hypothesis. Tables below display critical information needed for testing the hypothesis.

**Table 9:** Results of the Pearson Chi-Square Test of Independence

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.557 <sup>a</sup>	9	.001
Likelihood Ratio	19.471	9	.021
Linear-by-Linear Association	10.456	1	.001
N of Valid Cases	71		

a. 12 cells (75, 0%) have expected count less than 5. The minimum expected count is, 01.

*Source:* Field Data 2018

From Tables 9, it evident that the Chi-square statistic (p-value) is 0.01, which is less than 0.05 level of significance (alpha level). It showed that there was significant evidence to reject the Null Hypothesis and support the Alternative hypothesis.

Conclusion: There is significant evidence that competition in liberalised higher education influence strategic choices made through situational analysis so as to maintain a competitive advantage over other universities.

### Hypothesis 2

**Null Hypothesis H<sub>0</sub>:** The University does not need strategic measures to generate own financial resources to meet all operational costs.

**Alternative Hypothesis H<sub>1</sub>:** The University needs strategic measures to generate own financial resources to meet all operational costs.

Analysis of Table 7 apparently shows significant evidence to reject the Null Hypothesis and favourably consider the Alternative Hypothesis. The SPSS analysis of data indicates that respondents felt that the University of Zambia need strategic measures to generate its own revenues.

These strategic measures were highlighted as follows:

- Increase enrolment of students
- Introduce new degree programmes
- Charge cost reflective tuition fees
- Invest in infrastructure development (teaching, research and accommodation facilities)
- Develop business ventures through subsidiary business entities

### Hypothesis 3

**Null Hypothesis H<sub>0</sub>:** strategic responses are not important for UNZA to cope with emerging higher education environmental challenges.

**Alternative Hypothesis H<sub>1</sub>:** strategic responses are important for UNZA to cope with emerging higher education environmental challenges.

From Table 5, the views of respondents were that UNZA could use various strategic responses to address the emerging education environmental challenges brought about by a liberalised higher education in Zambia. Some of the strategic

responses were as follows:

- Growth strategy
- Product differentiation strategy
- Price-skimming strategy

From Table 5, there is evidence to reject the Null hypothesis and accept the Alternative hypothesis. Evidence shows that it is important for the University to develop strategic responses to emerging challenges so as to remain relevant and viable in view of the changing higher education terrain.

## 5. Discussions

The study on what strategic choices that the University of Zambia should take in order to cope with a competitive liberalised higher education sector in Zambia showed that 54.3% respondents contended that developing a competitive advantage and a positive brand would assist the University cope well with competition. And that 24.3% participants of the study felt that the use of ICT innovations in student enrolment would significantly enhance the position of the University in the higher education sector in the county. Meanwhile, 15.7% respondents contended that maintaining quality higher education standards was critical in higher education.

This scenario reflect what Fethke (2013) <sup>[4]</sup> who pointed out differences between private business enterprises and public universities and then to suggest that various characteristics of private sector excellence are applicable, often with modest alterations, to public higher education. This entails that private business enterprise spend efforts in developing competitive advantage and a positive brand in order to cope with competition. This tallies well with what Durkin (2012)<sup>4</sup> argued that the concept of marketing had gained significant attention in universities across the world from the 1980s onwards. This has been necessitated by significant increase in higher education competition. As a result, universities have developed more distinct brand identities by employing marketing principles to attract and retain students both in the local and international markets. This point was also emphasised by Otungu (2011) <sup>[12]</sup> who contended that the profit-maximising and competition-based theory explained that business organisation's main objective was to maximise long term profit and develop sustainable competitive advantage over rivals in the external market place. This theory argues that the positioning of an organisation in the external environment was a critical factor in achieving business objectives and remain competitive in the market and be above its competitors.

On long term strategic approaches to address challenges of a competitive liberalised higher education, 51.4% respondents put emphasis on increased infrastructure development. This was echoed by Kotecha (2012) <sup>[9]</sup> who recognised that in the 1970s governments in the Southern African Development Community (SADC) region invested less in higher education infrastructure which has led to a situation where demand for higher education has outstripped the capacity to provide it. This situation has created a fertile environment for the rapid growth of private universities because demand for university education has outstripped the capacities of long-established universities. In addition, Wolhuter (2013) <sup>[20]</sup> agreed with this

argument by stating that higher education in Africa was facing major challenges which include poor infrastructure. So infrastructure is one of the major challenges that public universities should be addressing through strategic investment. The other aspect of this study findings was the sources of revenue for the University of Zambia. It was indicated that 73% of revenues came from tuition fees, then 24% from Government and 3% from business ventures of the University. This situation conforms to the highlights in the University of Zambia Strategic Plan 2018 – 2022 (2018:5) <sup>[18]</sup> where it was stated that the University obtained 59% of its revenues from tuition fees, then followed by 33% from Government grants and 8% from internal business ventures. And Fethke (2013) <sup>[4]</sup> indicated that this situation was common to other public universities around the world such as North America and Europe where tightened government budgets forced university leaders to develop frameworks to provide the foundation for the transformation that needed to happen as universities face a permanent decline in public support. Moreover, it was confirmed that the distribution of data of this study followed an observed and expected distribution and was not by chance. And attributes of the study sample were reflective of the study population. The analysis of data using the Statistical Package for Social Sciences (SPSS) software and the Pearson Chi-Square Test of Goodness of Fit confirmed the above assertions. Besides, the Pearson Chi-Square Test of Independence showed that there was significant evidence to reject the main Null Hypothesis and support the Alternative hypothesis. In inference, the test revealed that there was significant evidence that competition in liberalised higher education influence strategic choices made through situational analysis so as to maintain a competitive advantage over other universities.

## 6. Conclusions and recommendations

This research has highlighted some of the issues that public universities are facing following the liberalisation of higher education in the Zambia. The study has shown that this situation has brought about a competitive higher education environment which calls for utilisation of various strategic responses by public universities. From the analysed data, public universities should develop strategic choices in order to operate in the competitive liberalised higher education sector in Zambia. These include developing a competitive advantage and a positive brand, use of ICT innovations in student enrolment and maintaining quality higher education standards. Additionally, for long term strategic approaches, increased infrastructure development was significantly stressed. This is to build capacities to meet the increasing demand in university education and competition from other universities. For instance, the University of Zambia is currently facing inadequate infrastructure to accommodate students, lecturers and insufficient lecture rooms, laboratories and research facilities as indicated in the University of Zambia Strategic Plan 2018 – 2018.

This study has established that the University of Zambia's main source of revenue was student tuition fees which was followed by grants from Government. This findings are reflected in the University of Zambia Strategic Plan 2018 – 2022 where tuition fees form the major source of revenue then

Government grants and internal business ventures.

In the case of the University of Zambia, the study has clearly shown that the institution is facing competition from both private and other public universities. Then strategic measures and responses which could be used to address these challenges have been presented. To a larger extent, this study has belaboured to show strategic measures that could be utilised to turn around the current situation by charging cost-reflective tuition fees, strict budget controls and increased infrastructure development.

The study also discussed the long term strategies to meet the demand for higher education and address the emerging challenges brought about by a competitive liberalised higher education. The product differentiation strategy was highlighted as the more appropriate one for the University of Zambia.

## 6.2 recommendations

From the study's findings, the following recommendations were made:

1. To operate in a competitive liberalised higher education sector, the University of Zambia Management should invest in Communication and marketing, use ICT innovations in higher education service delivery and invest in physical and virtual infrastructure
2. The University of Zambia Management should use the product differentiation strategy to address the emerging challenges in the higher education environment.
3. To remain financially viable, the University Management, particularly the Bursar's office, should employ Strategic planning and strict budget controls

## 7. References

1. Berchin II. *et al.* Strategies to promote sustainability in higher education institutions: A case study of a federal institute of higher education in Brazil. *International Journal of Sustainability in Higher Education*, Available from. 2017; 8(7): 1018-1038. <https://doi.org/10.1108/IJSHE-06-2016-0102>. Accessed on: 2 August 2018.
2. Dalken F. Are Porter's Five Competitive Forces still Applicable? A Critical Examination concerning the Relevance for Today's Business. 3rd IBA Bachelor Thesis Conference, Enschede, The Netherlands. Copyright University of Twente, Faculty of Management and Governance, 2014, Available from: <https://pdfs.semanticscholar.org/063f/be50003c29c81150bae86d4229ce38602a8f.pdf>. Accessed on: 29 August 2018.
3. Durkin M, McKenna S, Cummins D. Emotional connections in higher education marketing. *International Journal of Educational Management*. 2012; 26(2):153-161. Available from: <https://doi.org/10.1108/09513541211201960>. Accessed on: 5 September 2018.
4. Fethke GC, Policano AJ. Public no more universities: subsidy to self-reliance. *Journal of Management Development*. 2013; 32(5):525-536. Available from: <https://doi.org/10.1108/02621711311328291>. Accessed on: 2 August 2018.
5. Gomes CF, Yasin MM, Lisboa JV. Benchmarking competitive methods and strategic choices of Portuguese

- SMEs: Traditional practices and new realities. *Benchmarking: An International Journal*. 2009; 16(6):729-740. Available from: <https://doi.org/10.1108/14635770911000079>. Accessed on: 20 August 2018.
6. Higher Education Authority, [online]. Registered Private HEIs. Available from, 2017, [http://hea.org.zm/index.php/registered-private-heis2\\_](http://hea.org.zm/index.php/registered-private-heis2_).
  7. Kelchner L. The Advantages of a Product Differentiation Strategy. *Chron.com* [online]. Updated, 2018, Available from: <https://smallbusiness.chron.com/advantages-product-differentiation-strategy-17691.html>. Accessed on: 6 September 2018.
  8. Kostalova A. Application of chi-square test of independence in the utilization of postal and telecommunication services. *Proceedings of the 10th International Conference "Reliability and Statistics in Transportation and Communication, 2010, 20-23, Riga, Latvia, p. 163-171. ISBN 978-9984-818-34-4. Transport and Telecommunication Institute, Lomonosova 1, LV-1019, Riga, Latvia. Available from: http://www.tsi.lv/sites/default/files/editor/science/Publika\_cii/RelStat\_10/sess\_2\_kostalova.pdf*. Accessed on: 21 August 2018
  9. Kotecha P. Higher education in the Southern African region: Current trends, challenges, and recommendations. *Extraordinary Ministerial Summit 5 June 2012. Southern African Regional Universities Association. Johannesburg, South Africa, 2012.*
  10. Kuyela T. Education sector scores record successes in last 5 years. *Zambia Daily Mail newspaper* [online]. Uploaded on: Available from, 2016, <https://www.daily-mail.co.zm/education-sector-scores-record-successes-in-last-5-years/>. Accessed on: 14 July 2018.
  11. Manyukwe C. ZAMBIA: Third public university opens. *University World News. Africa Edition*. Available from, 2008, [http://www.universityworldnews.com/article.php?story=20080911163812433\\_](http://www.universityworldnews.com/article.php?story=20080911163812433_)
  12. Otungu OA, Nyongesa WJ, Ochieng OE. Strategic Management: The Link Between the agency theory and the company's competitive advantage. *International Journal of Business and Social Science*. 2011; 2:23 [Special Issue – December 2011. Available from: [http://ijbssnet.com/journals/Vol\\_2\\_No\\_23\\_Special\\_Issue\\_December\\_2011/28.pdf](http://ijbssnet.com/journals/Vol_2_No_23_Special_Issue_December_2011/28.pdf). Accessed on: 18 July 2018.
  13. Sanyal, *et al.* Higher education and the labour market in Zambia: expectations and performance. *The University of Zambia. UNESCO Press. 7, Place de Fontenoy, 75700 Paris. France. Available from, 1976, http://unesdoc.unesco.org/images/0007/000772/077226geo.pdf*. Accessed on: 17 January 2018.
  14. Shahidi N, Seyedi SM. The Impact of Globalization in Higher Education on the Universities' Educational Quality: A Regional Project on Shiraz Universities. *World Applied Sciences Journal*. 2012; 20(9):1300-1306, 2012. ISSN 1818-4952. IDOSI Publications. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.388.604&rep=rep1&type=pdf>. Accessed on: 8 September 2018.
  15. Taatila V. Paradigm shift in higher education ?. *On the Horizon*. 2017; 25(2):103-108. Available from: <http://doi.org/10.1108/OTH-06-2016-0030>. Accessed on: 8 October 2018.
  16. Teferra D. Funding Higher Education in Africa: State, Trends and Perspectives. *Journal of Higher Education in Africa / Revue de l'enseignement supérieur en Afrique*. 2013; 11(1):19-51. Available from: <https://www.jstor.org/stable/jhigheducafri.11.1-2.19>. Accessed on: 3 August 2018.
  17. The University of Zambia Strategic Plan 2013 – 2017. Background. UNZA Press, Lusaka. Zambia, 2012.
  18. The University of Zambia Strategic Plan 2018 – 2022. Towards Improving Services and Excellence in Higher Education Beyond Fifty Years. The University of Zambia. UNZA Press. Lusaka, 2017.
  19. Thole AMS. Foreword. UNZA Strategic Plan 2013 – 2017. University of Zambia. Page v. UNZA Press, Lusaka, 2012.
  20. Wolhuter CC, Wiseman AW. The Incalculable Promise of the African Continent: Higher Education Rising to the Occasion? *The Development of Higher Education in Africa: Prospects and Challenges. International Perspectives on Education and Society, Volume 21. Emerald Group Publishing Limited, pp.3 – 19. Available from, 2013, https://www.emeraldinsight.com/doi/pdfplus/10.1108/S1479-3679%282013%290000021004*. Accessed on: 1 September 2018.