Environmental Uncertainties and Challenges in Tertiary Education Management in Nigeria: Can Strategic Management make a Difference?

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Abstract

We conducted this study to investigate the efficacy of strategic management in addressing environmental uncertainties and challenges in tertiary education management in Nigeria. The population of the study was 311 managerial staff sourced from selected tertiary institutions in the South South Zone of Nigeria, while its sample size was 128. The survey research design was adopted with a questionnaire as the primary instrument used in data collection. Data analysis was done with both descriptive and inferential statistical tools. Findings of the study indicated that there was a low utilisation of strategic management in educational management in tertiary institutions in Nigeria. The result also indicated that an effective application of strategic management was capable of assisting in addressing environmental uncertainties and challenges in tertiary educational management in Nigeria. The study recorded an adjusted R2 = 0.717. It was concluded that strategic management can address uncertainties and challenges in tertiary educational management in Nigeria. Based on the findings of this study, it was recommended that tertiary educational institutions in Nigeria should step up the use of strategic management in line with global best practices in the education sector; it was recommended that owing to unending environmental uncertainties experienced in the tertiary educational institutions in Nigeria, managers/administrators of these institutions should effectively utilize strategic management in order to address such uncertainties and challenges, hence place them in good stead toward improved education service delivery and that tertiary educational institutions in Nigeria should prioritize the training of its managers and administrators on strategic management practices and principles applicable to the tertiary education system.

Keywords: Environmental Uncertainties and Challenges, Tertiary Education, Management, Tertiary Institutions, Strategic Management, Nigeria

Introduction

The need to conduct environmental analysis in relation to any organisation has never been in dispute. Therefore, whether in public or private concerns, given that

organisations are open systems constantly relating to their environment, there is the urgency to appraise developments in the environment. Such appraisal becomes even more important given the increasing level of environmental uncertainty in recent times in all areas of human activity, service offering or product delivery, and profit of non-profit. Environmental uncertainty has received the attention of both management practitioners and researchers because of its implication in the operations and results of organisations.

Some researchers in recent years examined the extent to which the degree of uncertainty exerted influence on frequency and approach to which the environment was being analysed by different organisations (Abu-Rahma and Jakeel, 2013). Similarly, Sund (2015) observed that uncertainty has now become central to many theories of organisation and strategy. Three types of uncertainty have been identified by Milliken (1990; 1987). These are state uncertainty, effect uncertainty, and response uncertainty. The first, state uncertainty, is concerned with uncertainty of managers/administrators in relation to trends in their environment. The second, effect uncertainty, deals with the inability of the manager/administrator to predict the likely effect of an environmental event or impact on the organization. The third, response uncertainty, deals with the manager's lack of certainty on how to effectively assist the organisation to respond to environmental changes. Given increasing environmental uncertainties, organisations are supposed to regularly conduct environmental analysis in order to position themselves in good stead to deal with uncertainties. One effective approach to doing this is through strategic management.

Strategic management explains the dynamic process of establishing where the organisation is headed as well as how it will be able to get there (Ebiziem, Ebere, and Izim, 2020). The authors added that strategic management was sensitive to changes in the internal and external environments of the organisation, thus creating and maintaining strategic fit between the organisation and its environment. In the same vein, Fildler (2012) explains that strategic management is a structure and systematic work process used to interpret mission, vision, and strategy towards its use in operations daily. Ezenwaka (2017) explains that strategic management is designed to assist organisations, including institutions, to effectively deliver on their mission; hence, the process is strategic since it enables the institution to effectively respond to changes in the environment (Ezenwaka, 2017).

In Nigeria, tertiary institutions, namely universities, polytechnics, and colleges of education, face environmental uncertainties and challenges in their activities. These uncertainties and challenges are more pronounced in areas such as but not limited to deteriorated infrastructure/equipment for learning, shortage of academic staff, increasing rate of graduate unemployment/unemployable graduates, students' unrest, unending strikes by unions, brain drain, financial crises orchestrated by limited resources, secret cultism, political interference, examination malpractices, among others, hence necessitated strategic management principles (Okolo and Gregory, 2021; Mwiya, 2017). Umoh, Nsien, and Umana (2020) observed that not much was known about strategic thinking and decision-making in higher education management in Nigeria. The authors emphasised the need to institutionalise strategic thinking in tertiary education management in Nigeria to facilitate dealing with environmental dynamism and to strengthen the survival of higher education institutions and their ability to realise goals.

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This study examines the efficacy of strategic management in addressing environmental uncertainties and challenges in educational management in tertiary institutions in Nigeria. Specifically, the study investigates the current state of usage of strategic management in educational management in Nigeria and the extent to which effective application of strategic management can assist in addressing environmental uncertainties and challenges in tertiary institutions in Nigeria.

Conceptual Issues and Theory Development

A number of uncertainties and challenges affect the quality of teaching and learning at the tertiary education level. There has been an increasing level of interest in the potential of strategic management in influencing positive outcomes in education management in Nigeria. For instance, Owolabi and Makinde (2012) investigated strategic management and organisational direction at Babcock University and found a significant positive relationship between strategic management and organisational direction. Abdulkareem, Akinnubi, and Oyediran (2011) studied strategic management implementation and internal efficiency in Nigerian universities and discovered a significant relationship between strategic management implementation and internal efficiency. Similarly, Chukwuma (2015) examined strategic management technique in tertiary institutions in Anambra State and found divergence in methods used in strategic management among institutions in the state. The researchers are not aware of any in-depth study that investigated strategic management and its capacity to address uncertainties and challenges in tertiary education management in Nigeria. This research topic was considered worthwhile given changing dynamics in the education sector, increasing demand by stakeholders for improved quality of education, limited resources at the disposal of managers and administrators, and increasing levels of strikes, unrests, and related crises in the tertiary education institutions in Nigeria.

The study is theoretically founded on systems theory. The systems theory was developed by a biologist, Ludwing Von Bertalanfy (1936). The theory holds that organisations comprise interrelated and interdependent parts that function as a whole to realise a common purpose. Thus, the systems theory considers an organisation as a system and as a sub-system. In this regard, tertiary education institutions are seen as social systems and as an extension of the larger society. Thus, institution inputs are from society; the institution processes inputs into finished products, which go back to society or are recycled as outputs into society. Therefore, a good understanding of developments in the environment is essential to the proper functioning of tertiary education institutions; hence, the need to conduct environmental analysis that empowers institutions to deal with environmental uncertainties and related challenges.

Ebiziem et al. (2021) lament that defective and poor strategic management in public educational institutions in Nigeria was a national disgrace. However, Nnamseh and Umoh (2019) observed that in view of environmental turbulence and uncertainty, it was necessary for institutions and organisations to embrace strategic management, which enables them to engage in managerial actions that focus more on the long-term survival of the concerns. In addition, Yaakob et al. (2019) are of the view that strategic management offers educational institutions the potential and opportunity for school administrators to proactively act by preparing for the future in a holistic manner. The authors, however, posit that there is no one perfect way to carry out strategic management in educational institutions, given that each part of the educational institution has its own interpretation of the models and activities associated with strategic management.

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Kander et al. (2022) observed that with strategic management, the quality of education can be improved. According to these authors, strategic management facilitates an effective policy-making process leading to the attainment of educational goals effectively and efficiently. The authors submitted that through strategic management, education planning and management by institutions can be done through the processes of;

    i.   Developing vision, mission and goals
    ii.   Identification of organization's internal and external factors
    iii.   Developing short, medium and long-term plans
    iv.   Implementation of education plan
    v.   Evaluation and control of institutional plans

Key Strategic Management Tools and Techniques

All over the world, the application of strategic management in educational institutions is done with tools and techniques such as SWOT analysis, PESTLE analysis, balanced scorecards, stakeholder analysis, and scenario planning. In Nigeria, Oyelude and Kehinde (2018) report that SWOT analysis, scenario planning, and stakeholder analysis are the topmost tools utilised by educational institutions in their strategic management efforts. Moreso, Tahir and Mahmood (2019) emphasised that the best practices of strategic management in educational institutions should be systematic and data-driven. This implies that there should be a thorough analysis of internal strengths and threats that would inform the institutional development of strategic goals and objectives. It is also expected that educational institutions should clearly establish their performance indicators and mechanisms designed to monitor the progress achieved in the implementation of strategic plans. Accordingly, Ngoma and Mwage (2017) emphasise the need to regularly evaluate as well as adjust the strategic plan on the basis of evidence and feedback to guarantee its effectiveness and relevance.

PESTLE analysis is a tool in strategic management used in analysing external environmental elements. These elements are political, economic, socio-cultural, technological, legal/regulatory, and ecological/environment. For educational institutions, these factors have implications; they are dynamic in nature and can impact the quality of education delivery.

Scenario planning is a strategic management tool originally used in the military environment. It enables educational institutions to effectively analyse possible developments in the future in relation to their operations and to prepare ahead such developments, thus acting proactively. SWOT analysis is a strategic management tool that enables educational institutions to effectively analyse strengths, weaknesses, opportunities, and threats associated with their activities and environment of operation. A balanced scorecard is a strategic management tool that facilitates the measuring and control of educational strategy using a systematic framework that captures both financial and non-financial aspects.

Methodology

The survey research design was adopted in this research. Through this design, the researchers obtained information from respondents on the research topic. The study's population was 311 drawn from managerial staff from three tertiary institutions in the South South Zone of Nigeria, namely, the University of Uyo, Uyo, Akwa Ibom State (143), the Federal College of Education, Omoku, Rivers State (72), and Auchi Polytechnic, Edo

State (96). The sample size determined through the Taro Yamane sample size determination formular was 175. This number was administered with copies of the questionnaire. Instrument validation was done with experts in the field of business management. Suggestions made on the instrument assisted in its modification. Similarly, a Cronbach Alpha reliability test was conducted on the research variables, with the result indicating an alpha coefficient of 0.74%. This was an indication that the instrument was reliable. The instrument was of the 5-point Likert scale format and scored strongly agree (SA = 5); agree (A = 4); disagree (DA = 3); strongly disagree (SD = 2), and undecided (UN = 1). Data presentation was done with descriptive analysis, while regression analysis served in the test of hypothesis. In total, 175 copies of the questionnaire were administered, while 128 copies were retuned in useable form. This indicated a 73.14% response rate.

Table 1: Respondents' Profile

Variables	Categories	Frequency	Percentage%
Gender	Male	82	64.06
	Female	46	35.94
	Below 30	3	2.34
Age Range	30-49	42	32.81
	40-49	36	28.13
	50 and above	47	36.72
Education			
	BSc/HND	86	67.19
	Postgraduate	42	32.81
Work Experience	1-5 Years	7	54.69
	6- 10 Years	38	29.69
	11-15 Years	46	35.94
	16 Years and above	37	28.91

Source: Field Survey, (2024)

Table 1 presents the profile of respondents in the survey. In the table, 82(64.06%) of the respondents were male while 46(35.94%) were female. Also, the table indicates that 3(2.34%) respondents were below 30 years of age; 42(32.81%) were in the age range of 30-39. Furthermore, 36(28.13%) respondents were in the age range of 40-49. Again, 47(36.72%) respondents were 50 years and above. In addition, the table showed that 86(67.19%) respondents had BSc/HND while 42(32.81%) respondents were in possession of postgraduate degrees. In the context of work experience, 7(54.69%) had experience of between 1-5 years; 38(29.69%) respondents had between 6-10 years of experience. Also, 46(35.94) had experience of between 11-15 years. Also, 37(28.91%) respondents had 16 years and above experience.

Results

Table 2 Descriptive Analysis of Constructs on the current state of usage of Strategic Management in Educational Management in Nigeria

Statements	N	Mean	SD	Decision
My institution has a Strategic Management document	128	3.83	0.48	Agree
Our educational management as an institution is guided by the Mission, Vision and education strategies captured in the institution's Strategic Management document	128	2.46	0.62	Disagree
As an institution, our educational programmes are based on a comprehensive analysis of possible challenges in our environment in the short, medium and long terms	128	2.18	0.33	Disagree
In our institution, we are proactive in identifying possible challenges and uncertainties, hence take concrete measures towards addressing them	128	2.47	0.59	Disagree

Source: Field Survey, 2024

Table 2 presents analysis on the current state of usage of strategic management in educational management in Nigeria. As an established rule, only a mean of score 3.0 and above on the statement was to be accepted while a mean of less than 3.0 was to be rejected. On the table, except for the statement on availability of strategic management document which recorded a mean of 3.83, other statements had mean scores below 3.0. The implication of this is that while there was in existence strategic management documents in tertiary education institutions in Nigeria studied, there was a general low application of the document in educational management.

Test of Hypothesis

Table 3: Results of Multiple Regression Analysis on Strategic Management and Environmental Uncertainties/Challenges in Educational Management

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA F-Value	Sig
1	.847a	.717	.645	9.291	2.382	0.000

a. Predictors: (Constant), Strategic Management

b. Dependent Variable: Environmental Uncertainties/Challenges

Table 3 is used to regress strategic management and environmental uncertainties/challenges in educational management in tertiary institutions in Nigeria. The R^2 of 0.847 shows the relationship between independent variable, strategic management and dependent variable, environmental uncertainties/challenges. The adjusted R^2 = 0.717 (or 71.7%), indicates that strategic management explained about 71.7% of the variation that exist in the dependent variable, environmental uncertainties/challenges. Therefore, strategic management can assist in about 71.7%

reduction in environmental uncertainties/challenges in tertiary educational institutions in Nigeria.

In the literature, Ebiziem, Ebere and Izim (2020) stated that strategic management was sensitive to changes in the internal and external environments of the organization, thus creating and maintaining strategic fit between the organization and its environment. Also, Nnamseh and Umoh (2019) in their research advised that in view of environmental turbulence and uncertainty, it was necessary for institutions and organizations to embrace strategic management which enables them to engage in managerial actions which focus more on long term survival of the concerns. Again, Yaakob et al., (2019) are of the view that strategic management offers educational institutions, the potential and opportunity for school administrators to proactively act by preparing for the future in a holistic manner.

Conclusion

This study was conducted to examine the efficacy of strategic management in addressing environmental uncertainty and challenges in tertiary education institutions in Nigeria. Findings of the study indicated that there was a low application of strategic management among tertiary education institutions in Nigeria. However, findings also indicate that an effective application of strategic management has the capacity to assist tertiary education institutions in Nigeria to address environmental uncertainty towards improved quality of educational service delivery. Thus, it is concluded that strategic management can assist in addressing uncertainties and challenges in tertiary education management in Nigeria. The researchers acknowledge possible limitations in this study. First, the study was limited to the South-South Zone of Nigeria, hence suffers generalisation limitations. Future studies should expand the scope of this study in order to address this limitation. Second, the study did not investigate the knowledge and experience of managers and administrators of tertiary institutions; this implied it may not be readily established the extent to which the administrators and managers can leverage strategic management in addressing environmental uncertainties and challenges currently facing tertiary education institutions in Nigeria. In line with this limitation, it is suggested that other researchers should examine the experience and knowledge of managers and administrators of tertiary education institutions in Nigeria to reveal their capacity to effectively utilise strategic management practices to advantage.

Recommendations

Based on the findings of this study, it is recommended that;
1. Tertiary education institutions in Nigeria should step up the use of strategic management in line with global best practices in the education sector.
2. It is recommended that owing to unending environmental uncertainties and challenges experienced in the tertiary education institutions in Nigeria, managers/administrators of these institutions should effectively utilise strategic management in order to address such uncertainties/challenges, hence placing them in good stead toward improved education service delivery.
3. It is further recommended that tertiary education institutions in Nigeria should prioritise the training of their managers and administrators on strategic management practices and principles applicable to the tertiary education system.

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