Factors Influencing Continuity of Academic Programs in Private Universities in Kenya: A Case of St. Paul's University

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Abstract: The main mandate of universities is providing academics through learning and research. This study specifically focused on how learning or continuity of academic programs can still take place in times of disruptions caused by e.g. fires, floods or community clashes. The study was conducted in St. Paul's University, a private chartered university in Kenya. The general objective of the study was to investigate the factors that can influence continuity of academic programs in private universities in Kenya while the specific objectives were: determining the influence of Business Continuity Planning on continuity of academic programs, assessing the influence of information communication technology on continuity of academic programs, establishing whether management support can influence academic programs continuity and lastly establishing how a regulations and/or laws can influence the continuity of academic programs at St. Paul's University. These factors can also be viewed as strategies or solutions on how academics can still continue during disruptions. Factors influencing the continuity of academic programs were outlined, tested, analyzed and findings deduced from the 121 respondents who participated in the study by way of interviews and completing questionnaires. Secondary data was retrieved from existing University policy documents. A descriptive research design was used. Descriptive statistics and regression analysis were used for data analysis. The Statistical Package for Social Sciences (SPSS) version 9 software tool was used to analyze data. Data presentation methods in terms of tables and charts were used. Qualitative data was summarized and categorized according to common themes and presented in frequency distribution tables. The study deduced that, influence of Business Continuity Planning on continuity of academic programs, influence of information communication technology on continuity of academic programs and the influence of imposed regulations/laws had an inverse correlation towards academic programs continuity while the influence of management support had a significant correlation with the dependent variable. Though the study's results, the researcher recommended that SPU should embrace business continuity planning in their operations as well as ICT usage as it has been proven to be viable options for the achievement of academic programs continuity. Lastly, external bodies such as CUE should impose regulations and laws which will ensure local private universities to have in place academic programs continuity strategies.

Keywords: Learning, Academic Programs, Academic Programs Continuity, University, Student, Faculty

1. Introduction

The World Conference on Higher Education, 1998 discussed that the mission of universities is to educate, to train and to undertake research. Shattock [1] further reiterated that universities mandates are learning and research. Other sources add a third reason being 'service'. Learning therefore can be defined as an agent in achieving academics through the different offerings of academic programs by universities [2]. This concludes that learning as an agent of completing academic programs by students is a core activity in universities hence in St. Paul's University, the case of this study. Students are able to acquire knowledge or learn through an academic program which may be defined as a broad area of study but usually referring to specific types of degree paths, namely pre-university, undergraduate and postgraduate academic programs [2]. The undergraduate academic programs take four years to complete while the pre-university and postgraduate academic programs may take two years or less [2].

As the importance of academic programs in universities has been provided as above, as well as exploring its agents, it is only prudent to conclude that continuity of academic programs is an important aspect in universities. Therefore, there should always be availability of this important service to students and faculty who are the main stakeholders in learning and teaching respectively of academic programs.

Though it is important to note that continuity of academic programs may be threatened if disruptions or an interruption of the academic calendar takes place. In Kenya today, fires, inter-community clashes, floods, strikes [3] are some examples of the calamities that Kenya is prone to. Calamities bring about disruptions [1] by causing significant physical damage or destruction to institutions or organizations, loss of life, or drastic changes to the environment. It goes without saying that these same calamities can affect institutions such as universities. Disruptions brought about by disasters or calamities can either be brought about by an act of God or a manmade event [1]. Disruptions do not come knocking at one's doorstep attempting to notify people that they are about to hit a nation, city, town, community or an institution [4] and that is why higher learning institutions should be well prepared for eventualities at all times. Disruptions may take minutes, hours, days or months to be rectified hence they have dire consequences to the continuity of academic programs which ultimately affect the university academic calendar. It is therefore wise for private universities in Kenya to have preparedness plans in place for the mitigation of such risks.

To further explain the importance of having preparedness plans and its effects on time, the different activities unique in a university are mainly dictated by the academic calendar. Any event threatening the continuity of the academic

calendar, in most cases disrupts learning since the calendar is time-based. The calendar should be followed to the letter by all stakeholders who include students, faculty, support staff and the management [5] so as not to delay activities such as continuous students' assessments, examinations, and graduations or disrupt the continuity of academic programs. Since an academic calendar is a framework that assists in the accomplishment of academics which include learning and examinations, there is need to ensure that disruptions which may affect the core activities in universities be inhibited to take place as much as possible [5]. Time lost as resumption of service is sought for, may never be recovered. It is because of this reason and the importance of continuity of academic programs in universities that disruptions be tamed. It is prudent to ensure that academics still continues in disruptive events, because as the saying goes, 'time is money'. Universities stakeholders need to come up with measures to ensure that learning thus continuity of academic programs even in unbearable situations continues [6].

The University of Texas [7] describes academic continuity as "the capability of higher education institutions to maintain teaching despite a disruptive event or the capability to quickly resume teaching given such an event. Academic Continuity is defined by Sloan Consortium as "the process of maintaining continuity of learning in a crisis situation caused by a natural disaster, human-induced (man-made) disaster, or other precipitating factor. It is the extent to which operations can be sustained which enable affected faculty, staff and students to continue academic activities during the response and recovery phases despite the disruption caused by the crisis."

Academic continuity is crucial to institutions of higher learning such as universities. To maintain learning there are important measures that have to be implemented by the concerned stakeholders to ensure continuity [7]. So as to establishment maintain academic programs, implementation of contingency plans are important [7]. The factors influencing academic continuity may be termed as contingency plans because they are established to be implemented when situations do not go on as planned. These contingency plans are also strategies which if implemented are going to ensure or maintain academic continuity [6]. Existence of contingency plans is of strategic in nature and of utmost importance to any organization and in this case they give such entities a competitive advantage over their competitors by ensuring business continuity. Since we have discussed the importance of academic continuity in a university, this study will design a framework or a blueprint that will enable continuance of education programs to take place in times of disruptions. Through the involvement of stakeholders, a framework will be retrieved by discussing the influencing factors towards achieving academic continuity [6].

Currently, universities in Kenya have very elaborate strategic plans but missing are such contingency plans which will maintain learning and research to go on in the event that a disaster hits. Academics/learning is the core activity of universities therefore there should exist plans or a framework to ensure continuity of learning is maintained or to ensure learning in cases where the faculty are separated from their student in one event or the other.

1.1 Research Objectives

The general objective of the study was to investigate factors influencing continuity of academic programs in private universities in Kenya while the specific objectives were:

- 1. To determine the influence of Business Continuity Planning on continuity of academic programs at St. Paul's University.
- 2. To assess the influence of Information Communication Technology (ICT) on continuity of academic programs at St. Paul's University.
- 3. To establish how management support influence continuity of academic programs at St. Paul's University.
- 4. To determine how a regulator will influence continuity of academic programs at St. Paul's University.

2. Theoretical Background

The study reviewed theoretical background on Learning and Business Continuity. Learning theories discussed are: Cognitive, Behaviorist, Humanistic and Social learning theories. The Business Continuity theory was extensively discussed.

3. Conceptual Framework

The study's conceptual framework consists of the dependent and independent variables. The dependent variable is continuity of academic programs while the independent variables are the existence of a business continuity plan; use of information communication technology; imposing regulation on private universities to ensure academic programs continuity and lastly management support towards achieving a culture of continuity of academic programs in Kenya private universities.

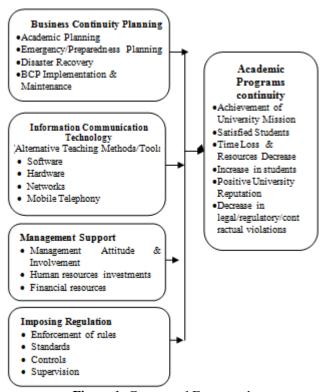


Figure 1: Conceptual Framework

Independent Variables Dependent Variable

4. Research Gaps

The use of information technology, to be precise, use of mobile telephony technologies to ensure academic programs continuity has not been researched on. Mobile telephony in Kenya has a big role to play towards academic programs continuity as these technologies enhance communication between entities. 29.7 million Kenyans out of 40 million own mobile phones, as reported by Commission Communication of Kenya [8] in the financial year 2011/2012. Hence mobile learning applications can be explored in the achievement of academic programs continuity.

Second, imposed regulations by an external body on Kenyan universities to ensure academic programs continuity strategies are put in place by universities management is another research gap that have not been researched on. Lastly, the effect of management support towards academic programs continuity lacks previous literature.

5. Research Methodology

The study adopted a descriptive survey design. The study's population was St. Paul's University Management and academic staff, totaling to 335. An appropriate sample size was deduced hence 183 respondents were used for the study. Stratified random sampling was used where there were three distinct strata composed of 21 University Management, 32 Deans and Heads of Departments and 130 academic staff bringing the total to 183. [9] discusses stratified random sampling as randomly sampling subgroups of the accessible population. Data collection tools used was questionnaires and interviews. A pilot study was first conducted on data collection tools before refined tools were administered to the respondents as suggested by [10]. Quantitative and qualitative data generated from the study, was first organized and then tabulated. All the responses to each question for each respondent were categorized, coded per variable, tabulated and then statistical inferences were drawn. Regression analysis was also used in the study to determine the statistical relationship between and among the variables under study. During data analysis, [9] supports the use of technologies to analyze data. In this case the researcher used Statistical Package for Social Sciences (SPSS) version 9 for data analysis.

6. Results and Discussion

The study's sample size was 183 respondents who comprised of the University Management, Deans and Heads of Department and other academic staff. Interviewing was the data collection tool used to collect primary data on the University Management who totaled 21 respondents. Out of the 21 interviewees only 18 were interviewed which translated to a response rate of 86%. The rest of the respondents totaling to 162 respondents composed of Deans, Heads of Departments and other academic staff were administered questionnaires where 143 questionnaires were distributed. There was a response rate of 103 where questionnaires were received from the respondents thus a

64% response rate. The study's total response rate was 121 out of 183 translating to 66%, which [11] suggests that it is an acceptable or good response rate in regard to the interview and questionnaire survey undertaken. A comparative study between the use of interviews and use of questionnaires as data collection tools shows that the former had a higher response rate compared with the later. This is supported by [11], who reiterates that for face to face surveys, a response rate of 80% - 85% is good. This paper will focus on two independent variables only, which are, business continuity planning and management support. Analysis and discussion on the dependent variable will also be discussed.

6.1 Business Continuity Planning

All the sub-variables under business continuity planning were analyzed as in table 1, hence indicating that, 58% of the respondents did not feel that Business Continuity was part of the St. Paul's University strategic plan. The sub variable's mean is at 2.93 meaning that the standard deviation deviates by 2.1 from the maximum mean of 5. From secondary data retrieved, there exists a strategic plan but the plan does not contain details of continuity planning or disaster recovery planning in cases when SPU is hit by a calamity [12]. This also was confirmed by members of the University Management who the researcher interviewed. This sub-variable was asked by the researcher to find out the status of St. Paul's University in preparedness planning or resiliency in operations. Since the research was to make an evaluation of the status of the University on various independent variables tested as affirmed by [13] and [9] such questions were asked to seek the status of the University on business continuity planning.

The researcher also wanted to find out whether there is availability of documented BCP and Disaster Recovery Plans in SPU and also Disaster Recovery Professionals in SPU. The two sub-variables were rated the least by scoring 53% and 54% respectively with a deviation from the mean as 2.36 and 2.33 respectively. Due to this, it confirms the first sub-variable that SPU University does not have any preparedness plans in place to ensure continuity of operations.

As much as business continuity plans in SPU do not exist, a majority of the respondents translating to 81% agree that disruptions could hinder the continuity of academic programs when unforeseen events such as fires, floods, community clashes, strikes etc. render SPU unfit to continue operations. This collaborates with Shattock's findings where he discusses that acts of God or man-made events could cause disruptions [1].

Though calamities might negatively affect learning or continuity of academic programs, a majority of the respondents agreed to the idea of having in place a BCP in all management levels scoring 84% with a deviation of 0.82, BCP Implementation scoring 81% with a deviation of 0.09 and lastly practicing BCP where 81% of the respondents showed positive responses towards achieving continuity of academic programs. Ken Doughty affirms that business continuity planning should be an integral part of running an organization which concurs with the study's respondents

through the responses given on support of business continuity [14].

Table 1: Analysis of Business Continuity Planning (BCP)

				-8 (2)	- /
Factor	Max	Actual	(%)	Mean	Std.
	Score	Score	Score		Dev.
BCP is part of SPU Strategic Plan	605	351	58	2.93	2.1
Availability of documented BCP	605	320	53	2.64	2.36
and Disaster Recovery Plans in SPU					
Availability of BCP and Disaster	605	324	54	2.67	2.33
Recovery Professionals in SPU					
Disruption could cause	605	489	81	4.01	0.09
interruption of academics					
Existence of BCP at all	605	506	84	4.18	0.82
management levels will promote					
continuity of academics					
BCP Implementation at all	605	483	80	3.99	1.01
management levels can promote					
continuity of academics					
Practicing BCP could lessen	605	491	81	4.05	0.95
expenses					
Extent to Which SPU is prepared	605	331	55	2.73	2.27
for disasters					

6.2. Analysis of Management Support

Table 2 shows the influence of management support towards achieving academic programs continuity in St. Paul's University. Six sub-variables were analyzed where it was noted that this particular independent variable had an overwhelming positive response compared to other studied. independent variables This means that management's support is crucial and important before, during and after the implementation of continuity plans in St. Paul's University, just as [15] suggests. Peter Drucker, the father of management, discussed that management support is key in any organization for the achievement of the organizations objectives and goals.

The most popular sub-variable, 'providing leadership and guidance by top management in the implementation of academic programs continuity' at 87% received an actual score of 525 with a deviation of 0.66 from the mean. Due to this, leadership and guidance is pertinent towards achieving academic programs continuity. Among other sub-variables that are in favor of continuity of academic programs are 'allocation of manpower/staff from all levels and department', 'allocation of monies by top management' and 'seeking external expertise in the area of business continuity planning'.

Though the sub-variable 'establishing steering committees to head and steer business continuity plans' was rated poorly at 83%, it is wise to take a closer look at the standard deviation of all the individual sub-variables. The researcher notes that the deviations do not show a big disparity from the most popular sub-variable therefore the researcher concludes that all the sub-variables in this independent variable are feasible actions that the University management can adopt towards achieving academic programs continuity.

The analysis of the respondents data indicate that it is the role of the management to allocate resources and manpower, initiate strategies and provide guidance and leadership

towards attaining the goals of the organization as [15] suggests and discusses in his book, 'Principles of Management'.

Table 2: Analysis of Management Support towards Academic Programs Continuity

Factor	Max	Actual	(%)	Mean	Std.
	Score	Score	score		Dev.
Allocation of monies by top	605	522	86	4.31	0.69
management					
Allocation of manpower/staff from all	605	524	87	4.33	0.67
levels and department					
Establishing steering committees to		500	83	4.13	0.87
head & steer business continuity plans					
Seeking external expertise in the area		509	84	4.21	0.79
of business continuity planning					
Providing leadership and guidance by		525	87	4.34	0.66
top management in the					
implementation of academic programs					
continuity					
Positive attitude from top		508	84	4.20	0.80
management in initiating and					
implementing academic continuity					
strategies					

6.3. Analysis of Continuity of Academic Programs

Analysis of the dependent variable under study 'continuity of academic programs' is shown in table 3. Many respondents concurred with the sub-variables under this variable. Decrease in loss of time, achievement of unit's/subject's learning objectives and promotion of the University's academic mission were ranked first, second and third respectively compared to the other dependent sub-variables. This means that 89% of the respondents felt that if academic programs continuity is achieved, there will be decrease in loss of time as well as improved work efficiency; 87% of the respondents felt that unit's/subject's learning objectives will be achieved and the same percentage of the respondents felt that the achievement of the University's academic mission will be gained if there is continuity of academic programs in St. Paul's University.

Table 3: Analysis of Continuity of Academic Programs

Max	Actual	(%)	Mean	Std.
Score	Score	score		Dev
605	525	97	121	0.66
003	323	0/	4.34	0.00
CO5	605 526	87	4.35	0.65
003				0.65
605	521	86	4.31	0.69
605	540	89	4.46	0.54
605	504	83	4.17	0.83
605	428	71	3.54	1.46
605	511	0.1	4 22	0.78
003	311	04	4.22	0.78
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6.4. Regression Analysis Model

The dependent variable 'academic continuity planning' contained seven indicators or sub-variables, therefore since the indicators were several, factor analysis was used to condense or reduce correlating variables to a manageable

number as advised by Bartholomew, D. [16] in his book 'Analysis of multivariate Social Science data'. Therefore factor analysis was run on the dependent sub variables where the result was a manageable index was derived. From the index, the independent variables were regressed against the dependent variable as below.

6.4.1. Influence of Business Continuity Planning (BCP) and on Academic Programs Continuity

Regression analysis was run on business continuity planning against the dependent variable and whose results are displayed in table 4 below. The multiple regression equation is displayed as follows:

$$\begin{array}{l} Y_{1}\!=\!\beta_{0}\!+\!\beta_{1}\;X_{1}+\beta_{2}\;X_{2}\!+\!\beta_{3}\;X_{3}\!+\!\beta_{4}\;X_{4}\!+\!\beta_{5}\;X_{5}+\beta_{6}\!X_{6}\!+\!\beta_{7}\;X_{7}\!+\!\beta_{8}\;X_{8}\!+\!e \end{array}$$

Table 4: 1nfluence of Business Continuity Planning (BCP) and on Academic Programs Continuity

and on Academic Programs Community								
Coefficients								
Model		Jnstandardized Coefficients		Standardized Coefficients		Sig.		
		Std. B Error		Beta	t			
1	(Constant)	-0.458	0.989		-0.463	0.644		
	BCP part of SPU Strategic Plan	0.044	0.089	0.06	0.498	0.62		
	Availability of Documented BCP in SPU	-0.011	0.094	-0.014	-0.118	0.907		
	Availability of BCP Professionals in SPU	0.202	0.082	0.277	2.473	0.016		
	Disruptions Can Interrupt Learning	-0.076	0.103	-0.08	-0.734	0.465		
	BCP Existence Will Promote Preparedness Planning	0.086	0.138	0.07	0.624	0.535		
	BCP Implementation In All Levels	0.099	0.101	0.108	0.975	0.333		
	BCP Will Reduce Operational Expenses During Disruptions	-0.07	0.126	-0.062	-0.556	0.58		
	SPU Disaster Preparedness Status	-0.152	0.09	-0.19		0.096		
a. Dependent Variable: REGR factor score 3 for analysis 2								

To explain the equation above as suggested by [13], Y_1 represents the dependent variable 'academic programs continuity'. The eight sub variables, denoted as 'X' in the regression equation, show both positive and negative relationships with the dependent variable. For example X_1 'BCP part of SPU Strategic Plan', X_3 , X_5 and X_6 show a positive relationship meaning that there is a significant influence on the achievement of the dependent variable. On the contrary, some sub variables show a negative correlation e.g. X_2 , X_4 , X_7 and X_8 . Ultimately, according to the regression analysis deduced as above, it shows that the respondents' did not feel that business continuity planning has a significant effect towards academic continuity planning as shown by β_0 the constant at -.458.

6.4.2. Influence of Management Support on Academic Programs Continuity

'Management support', an independent variable was regressed against 'academic programs continuity' the

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dependent variable whose results are shown in table 5. The multiple regression equation is displayed as follows:

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where;

 β_0 - Constant/ Y intercept of the Regression Equation

 β_1 - Variable of Monies Allocation

β₂ - Variable of Manpower Allocation

 β_3 - Variable of Steering Committees

β₄ - Variable of External Expertise

 $\beta_5\,{}_{\mbox{\tiny L}}$ Variable of Leadership and Guidance

β₆ Variable of Positive Attitude by Management

Using the data collected from the study, a regression was run and the results are fitted in the equation below

$$Y1 = 0.257 + 0.094X_1 + 0.067X_2 - 0.138X_3 - 0.181X_4 + 0.055X_5 + 0.035X_6 + e$$

 Y_1 represents the dependent variable while X_1 represents 'monies allocation'. The observations and inferences made from the above regression equation is that there is a positive correlation relationship between the top management support through the allocation of monies, manpower allocation, offering leadership and guidance and lastly by having a positive attitude towards achieving academic programs continuity.

Though, there are sub-variables that indicate an inverse correlation with academic programs continuity such as management putting in place steering committees and seeking external expertise to ensure academic programs continuity strategies are put in place. This is so because the coefficients display as negative and so they have a negative relationship towards achievement of academic programs continuity [13].

The β_0 which is the constant or the y-intercept of the regression equation indicates a positive or significant correlation with the dependent variable reading 0.257. Respondents therefore felt that this independent variable has a positive influence towards achieving academic programs continuity [13].

Table 5: Influence of Management Support on Academic Programs Continuity

<u> </u>									
Coefficients									
Model		Unstandardized Coefficients		Standardized Coefficients		g:			
		В	Std. Error	Beta	t	Sig.			
1	(Constant)	0.257	1.069		0.24	0.811			
	Monies Allocation	0.094	0.143	0.068	0.655	0.514			
	Manpower Allocation	0.067	0.125	0.055	0.535	0.594			
	Steering Committees	-0.138	0.117	-0.121	-1.183	0.24			
	External Expertise	-0.181	0.112	-0.172	-1.618	0.109			
	Leadership And Guidance	0.055	0.114	0.05	0.487	0.628			
	Positive Attitude by Management	0.035	0.113	0.033	0.31	0.757			
	a. Dependent Variable: REGR factor score 3 for analysis 2								

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7. Conclusions and Recommendations

Though there was an inverse relationship between business continuity planning and academic programs continuity, it is only wise to state that disasters can take place any time thus cause disruptions to academic programs continuity. There being no business continuity plans in SPU from the descriptive results analyzed in table 1, the same respondents feel that the availability of a University continuity plan will aid SPU achieve academic programs continuity. Therefore private universities in Kenya should put in place a business continuity plan which will ensure that operations in the university and especially academics continue even during disruptions. Having a comprehensive insurance scheme to protect against calamities is not enough but a business continuity plan is appropriate as it encompasses disaster recovery strategies which will aid the University to recover quickly from disasters if a plan is available.

This study established that management support influences academic programs continuity. Both results of the regression analysis and descriptive statistics show positive correlation and results on the influence of this independent variable and the dependent variable. This means that it is an ideal strategy towards attaining academic programs continuity if SPU was ever hit by a disaster. Therefore St. Paul's University Management should support in achieving continuity of academic programs by allocation of monies; manpower; seeking external expertise from business continuity professionals to ensure continuity of operations and especially on academics; having a positive attitude before, during and after the implementation of the strategies (independent variables) as well as instilling a positive attitude to the other SPU employees and lastly establishing an internal team from across the departments that look into continuity strategies in SPU.

7.1. Future Scope of the Study

The focus of the study was to evaluate the factors that can influence the continuity of academic programs in St. Paul's University. The research focused on the influence of business continuity and academic planning, influence of ICT usage, influence of management support and influence of imposed regulations/laws on academic programs continuity.

Since three out of the four independent variables gave negative results towards academic programs continuity, a research should be done on the factors leading to this negative correlation with the dependent variable in St. Paul's University.

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