Exploring the Impediments to New Learning Habits in View of Change Management - A Comparative Study of Botswana Accountancy College(BAC) and Botho University (BU)

WILBERT KUDAKWASHE CHIDAUSHE

Department of Accounting and Finance, Botho University, Gaborone, Botswana.

Abstract

The study explored the impediments and best practice use of change management in the transition to new learning habits at the institutions of higher learning in Botswana. Two institutions of higher learning were considered in the study, where e-learning initiatives are rather prevalent. The research also involved a review of literature from the seminal authors. The study used the qualitative research methodology involving a questionnaire survey and used semi-structured interview administered questionnaire at exploring the factors that impede the transformation from traditional learning to e-learning. A total of fifty questionnaires were administered using purposive random sampling of students, lecturers and academic administrators at the studied institutions. The objective of the study was to explore into the hindrances to a successful change to e-learning from traditional learning methods that were experienced at the two institutions of higher learning. The next objective of the study was to explore the best means of changing from traditional learning methods to digital learning. It was revealed by the research that insufficient exposure to digital training, lack of proper planning, lack of involvement of the affected stakeholders, lack of commitment by top management and inadequate resources are the major reasons behind the resistance to change at the Botho University (BU) and Botswana Accountancy College (BAC). In the study resistance to change was regarded as not a barrier to change but rather the reasons causing the resistance to organizational transformation into e-learning were the obstacles to the e-learning transition. The best

means of changing from traditional learning to e-learning that was observed among others were education and training, participation and involvement, facilitation and support. Organizational readiness was also been regarded as a critical requirement to afford the successful transition to e-learning. The study ended with the provision of recommendations targeted at contributing to relevant capacity building and aimed at influencing the future development of policy issues with regard to the successful transition to e-learning.

Introduction and Background

E-learning was defined as learning supported and facilitated through the use of information and communication technology.[1] E-learning was further considered as the learning content or instructional experiences delivered or enabled through electronic technology.[2] E-learning is regarded as a communication that is electronically mediated through synchronous and asynchronous communication for confirming and constructing knowledge.[3]

Synchronous learning initiates a meeting or lecture or course in the classroom using internet-based technologies. In addition, synchronous learning requires all participants to be available simultaneously and as it is life. In comparison, asynchronous learning is based on the web in the form of computer-based training (CBT) and facilitated through the organization's local area network.[4]

E-learning involves the use of digital technology to facilitate learning, teaching and assessment. This involves using web 2.0 technologies, use of online student feedbacks, use of online staff observation exercise, use of premier ESS for staff performance reviews, the use of computers, internet, the blackboard and smartphones to pass pedagogical instructions to students and obtain feedback. E-learning involves the use of collaborative learning tools facilitated through the internet enabled web 2.0 technologies, it includes the use of networking tools, blogs, twitters and file sharing facilities and discussion forums.

Botho University is one of the few institutions in Botswana that has over the years transformed and evolved to blended learning in alignment to global standards and it predominantly uses the blackboard technology as part of the delivery of its curriculum and pedagogical instructions to the diversity of students that include distance and full-time government sponsored students.

Blended learning can be regarded as delivering learning through interactions with the learner that involve both face to face and online. Blended learning is regarded as the face to face fusion with experiences of learning online.[5] It was postulated that many institutes of higher learning prefer the blended learning approach of delivering the curriculum.[6]

Teaching Excellence is one of the approaches used at Botho University to instigate and envisage e-learning as a tool to deliver and enhance learning through pedagogical instructions. Excellence in teaching and learning has been referred by most institutions of higher learning as a way to pass the policy to the various stakeholders regardless of the delivery method employed.[7]

During the evolutionary stages from traditional learning to e-learning Botho University has experienced a marked degree of resistance of the use of digital learning techniques mostly in administration, teaching, assessment and learning. Training are frequently conducted for administrative and academic staff to enable coping up with the e-learning systems.

The proposed project wishes to explore the factors that restrain the successful transformation from traditional learning, teaching and assessment methods to the new digital learning habits at institutions of higher learning in Botswana. In addition, the project also aspires to look into the best use of change management techniques at

higher institutions of learning in the transformation from the traditional learning methods to the new learning habits.

The introduction and background of this study are subsequently followed by a statement of the problem, objectives, literature review, methodology, discussions and interpretations, key findings, conclusions and recommendations.

Problem Statement

Since the evolution of e-learning in recent years, most institutions in the developed world have successfully adopted e-learning in teaching, learning and assessment at Universities and other Institutes of Higher Learning. In developing countries transition from traditional learning to e-learning is often met with some degree of resistance that eventually affects its successful implementation. The major impediments of the transition to e-learning at the institution of learning in developing countries is dependent upon the human element of accepting the change or resisting change. The most hindrance to the successful integration of technology into teaching, learning and assessment in most developing countries were emanating from the resistance by faculty members infully accepting the new techniques of teaching, learning and assessment. This was contributed partly by a lack of experience in the use of e-learning in accordance with the study findings of Zubavdah *et al.*,(2018).[8]

In Botswana, a developing country in Southern Africa, the need to transform from the traditional learning habits to e-learning has been met with some form of resistance at Botho University (BU) and Botswana Accountancy College (BAC). Hence the major problem that needs to be sought by this study is on what are the impediments to the successful transition from traditional learning methods to new learning habits at universities in Botswana?

The following research questions are associated with the problem

1   What are the impediments of the successful transition from the traditional learning methods to new-learning habits at BothoUniversity and Botswana Accountancy College?
2   What are the best practice change

management techniques of transforming from traditional learning methods to new learning habits at BothoUniversity and Botswana Accountancy College?
3   What are the commendable best practice change leadership techniques that administrators and policy makers can pursue in the transition to e-learning?

The research questions require answers from academicians and administrators at Botho University and Botswana Accountancy College.

Objectives

The objectives of the research are to;

1   Explore the impediments to the successful transition from traditional learning methods to e-learning at BU and BAC.
2   Explore the best practice change management techniques to enable a successful transition to e-learning.
3   Establish the best practice change leadership techniques to enable a successful transition to e-learning.
4   Determine whether universities' governance and interdependencies with industry and government affect the successful innovation to e-learning.
5   Recommend best practice change leadership techniques that administrators and policymakers can pursue in the transition to e-learning.

The Purpose or Significance of the Study

The purpose of the study is to;

1   Inform academic administrators at higher institutes of learning of the obstacles and the best ways of changing to e-learning.
2   Supply change management tools to administrators that will afford institutions of higher learning to successfully implement new learning habits.
3   Contribute towards the successful transformation to e-learning at the institutes of higher learning to ensure that Botswana becomes a knowledge-based economy with regard to the e-learning initiative they have implemented.

4   Be an instrumental in the development of e-learning policy issues at the national level and at the institutional level in Botswana.

5   Be conceptual as it would enhance the understanding of e-learning implementation policy issues at the institutions of higher learning in Botswana.

6   Afford capacity building at the institutes of higher learning as the study promoted and encouraged technical skills and personal skills development at the institutes of higher learning in Botswana with regard to the application of relevant change management techniques in the transformation to e-learning.

Theoretical Framework

The theoretical framework can be regarded as a readily available made map for the intended research which consists of interrelated concepts that exist in the literature.[9] Hence the theoretical lens through which this research was guided is based is on a TIPEC framework which highlights e-learning implementation barriers.[10] This theoretical framework provides a useful summary of e-learning barriers that already exist in the literature categorizing the impediments into a TIPEC framework comprising of Technological, Individual, Pedagogical and Enabling Conditions barriers.[11]

The barriers relating to technology were bundled into seven impediments consisting of technological infrastructure, technical support, bandwidth issue & connectivity, software and interface design, compatibility technology, poor quality of computers and virus attack. Twenty-six individuals barriers to e-learning were identified comprising of prior knowledge, student motivation, technological difficult, technological experience, awareness & attitudes towards ICT, computer literacy, technophobia, culture. Response to change just to mention a few. Twenty-eight pedagogical barriers were uncovered consisting of faculty effort, faculty development, lack of ownership, lack of feedback, engaging students online, pedagogical model, faculty training, weak learning management system, level of knowledge of teacher etc. The following were enabling conditions barriers revealed, administration support, set-up cost/limited funds, security, language barrier, rules & regulations, ethical barriers and load shedding of electricity(see figure 1 below).[11]
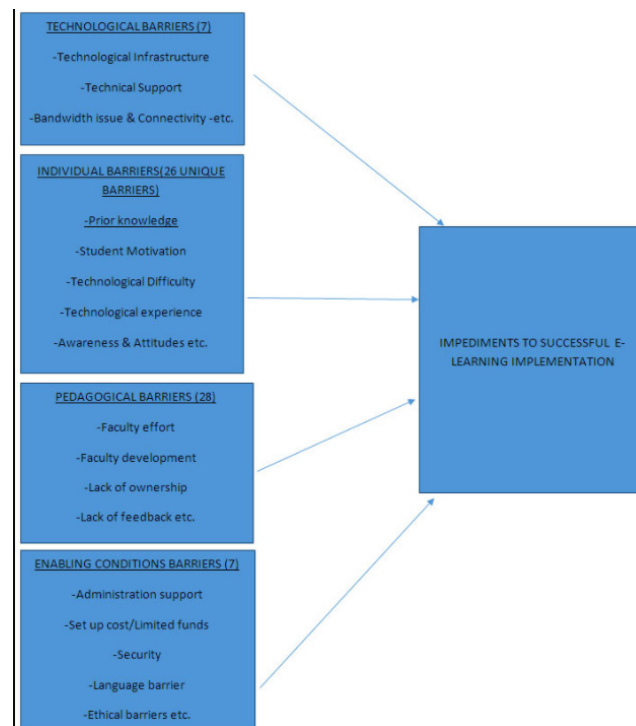

Fig. 1: Impediments to E-Learning Implementation

Conceptual Framework

The system of expectations, theories, concepts and assumptions that informs and support the research and which is the key component of the research design is coined a conceptual framework.[12]

A conceptual framework was regarded as a written or visual product that explains either in narrative form or graphically the main things to be studied, the key factors, concepts or variables and the presumed relationship among them. It is primarily a conception or model of what is out there that is planned to be studied and is regarded as a tentative theory of the theory that you are investigating. The purpose of the conceptual framework is to inform the rest of the research design, it helps assess, refine the goals, to develop realistic relevant research questions, select appropriate methods and identify potential threats to the conclusion.[14]

In addition, a conceptual framework was regarded as a plane of interconnected concepts which establish a framework specific philosophy for the phenomenon under investigation. Furthermore, conceptual frameworks are characterized as having methodological, ontological and epistemological assumptions and that concepts within a conceptual framework play ontological and epistemological functions.[15] Ontological assumptions signified the nature of reality, whilst epistemological assumptions are linked to how things really function in the envisaged reality.[16]

The study's conceptual framework anchored on the'Balanced Triple Helix System'which is regarded as an analytical framework for innovation policy and practice in the knowledge society and hence the conceptual framework aligns well with the objectives of study of determining whether universities' governance issues and interdependencies with industry and government affect the successful transition to e-learning in view of change.

In the past, the State used to lead the way in terms of coming up with new innovation for both the industry and the universities, but nowadays most universities' governance is taking a lead after consultation with both the relevant government agencies and industry in the implementation of e-learning for the benefit of all their stakeholders.

In accordance with systems theory the Triple Helix System was regarded as a set of[17];

1   Components-comprise University, government and industry with an array of actors.
2   Relationships between components-comprise collaboration and conflict moderation, collaborative leadership, substitution and networking.
3   Functions- comprises processes taking place in knowledge, innovation and consensus space.

Three Variants of the Triple Helix System

1   Static model-in the static regime the government plays the lead role, driving academia and industry but limiting their capacity to initiate and develop innovative transformations.
2   Alassez-faire -characterized by limited state intervention in the economy and industry as the driving force
3   A balanced triple helix (see figure 2 below)- offers the best insights as the best environment for innovation and allows for creative synergies and set in motion a process of " innovation in innovation" creating new venues for interaction and new organizational formats, as individual and organizational actors not only perform their own role but also "take the role of the other" when the other is weak or under-performing.[18] Therefore as a result of this creative process, the relationship among the government, university and industry had been reshaped continuously in an endless transition to enhance innovation bringing forth new types of relationships, new technologies and new firms[18].

Literature Review

The section refers to the review of literature based on the impediments and the best practice change management tools to the successful transformation to e-learning.
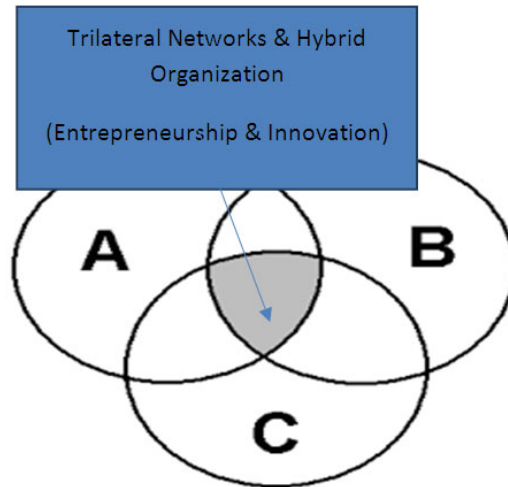
A- Academia (Institutes of higher learning or Universities)
B- Government (as major sponsor &policy maker)
C- Industry(Economy, as major employer)

Fig. 2: The Balanced Triple Helix

The Impediments to the Successful Transformation to e-learning at the Institution of Higher Learning

In an article entitled the impediments to the use of e-learning implementation, the study revealed three categories of the impediments that included, barriers of higher degree, impediments of medium degree and impediments of lower degree. The barriers to the use of e-learning of a higher degree that was revealed by the study were that some courses required real observations and hence there were some difficulties in applying e-learning to some courses. Few qualified technicians, lack of experience in the use of e-learning, students' lack of access to computers and internet and poor internet services were noted as impediments to the use of e-learning from the point of view of the faculty. The impediments of medium degree identified in the study were inadequate counselling sessions and meetings, lack of engaging students in communication, inadequate planning, inefficient technical support and updates. The impediments of lower degree that were noted in the study were that significant amount of time and efforts were required for successful implementation of e-learning, lack of social perception inclination towards the implementation and difficulties in dealing with the implementation.[19]

In yet another study entitled a conceptual framework highlighting e-learning implementation barriers. In this study sixty-eight barriers were discovered and carefully explored through data-driven qualitative content analysis that involved hermeneutics. The sixty-eight barriers to e-learning implementation that were uncovered by the study were placed into four conceptual categories comprising of enabling conditions, pedagogy, individual and technological barriers. The four categories led to the design of the conceptualization termed the TIPEC framework which provides a summary of e-learning barriers that are useful to educational practitioners, policy makers, system developers and researchers. The TIPEC framework was aimed to consolidate and structure literature with regard to e-learning implementation barriers through an in-depth qualitative review of e-learning literature commencing from 1990 to 2016

The study revealed the following as the Technological barriers in the literature to e-learning, technological infrastructure, technical support, bandwidth issues and connectivity, software and interface design, compatible technology, poor quality of computers and virus of attacks.

The individual barriers to literature related to e-learning that were noted among others were

poor knowledge, student motivational issues, technological difficulty, technological experience, awareness and attitudes towards ICT, computer literacy and student support issues.

The pedagogical barriers in the literature related to e-learning that was uncovered in the study were a faculty effort, faculty development, lack of ownership, lack of feedback, quality of course content, students' engagement online and pedagogical model.

The enabling conditions barriers in the literature related to e-learning discovered in the research were administrative support, set up costs, security, language barrier, rules and regulations, load shedding of electricity and ethical barriers.[20]

In accordance with a study conducted at Higher Learning Institutions (HLI) in Tanzania, the study was based on an empirical review of eighteen literature reviews from seminal authors,the following was revealed as critical impediments to e-learning, serious problems of technological infrastructure, low internet bandwidth, lack of ICT competence, lack of e-learning policy, lack of technical support and lack of managerial support.[21]

In a quantitative and qualitative study termed 'view of barriers and opportunities of e-learning implementation in Iraq' involving the use of survey instrument, semi-structured interviews and focus group the following were highlighted as the external and internal challenges hindering effective implementation of e-learning in Iraq, the external challenges that were identified in Iraq were low internet bandwidth, lack of funding, that is there was no budget allocation that was meant for e-learning in Iraq, lack of e-learning culture, lack of planning to implement e-learning and poor infrastructure. Further, the study uncovered the following as internal challenges of implementing e-learning in Iraq, difficulties in preparing e-lecturers, that is of persuading academic staff dedicated to traditional methods to endorse e-learning and low teacher morale or motivation to use e-learning.[22]

In a cross-sectional study based on a questionnaire survey entitled 'Barriers in Implementing e-learning' the following were regarded as barriers to e-learning, lack of proper training on e-learning courses, limited communication with the instructor, the dominance of English language and lack of research grants for e-learning.[23]

In the article the 'five barriers to change management' five barriers to change management were uncovered as, lack of employee involvement, lack of effective communication strategy, a bad culture shifting planning, unknown current state and organizational complexity.[24] In addition in another study, it was found that the barriers to the successful adoption of e-learning were dependent upon the degree of sophistication of general communication technology used by the organization. This study revealed that in order for an organization to be successful in the adoption of e-learning it needs to be ready for the e-learning strategy.[25]

Further, the following factors were regarded as having an influence on the development of e-learning at the institutes of higher learning in Pakistan, tutors' capability to integrate technology with learning and teaching activities, attitudes and development approach, the participation of users, training of users, project management and change management. In addition, it was asserted that the absence of integration in technology in teachers as a major concern in educators in the light of information based world society.[26]

It was confirmed that the majority of e-learning projects failed in Sub-Sahara Africa because of a variety of obstacles in countries that are developing for instance because of insufficient infrastructure.[27]

Forty-three hindrances were discovered to the successful transformation to e-learning and were categorized into eight critical success factors such as socio-cultural, political, infrastructural, legal, regulatory, leadership, educational and skills, security, safety and technical.[28]

In addition, it was discovered that institutions of higher learning in Libya faced a variety of challenges arising from attitudes towards e-learning, cultural and linguistic background of instructors and students, lack of know how in curriculum development relating to e-learning and lack of top management support for the e-learning projects.[29]

In Nigeria, it was stressed that electricity, lack of awareness and inadequate training of staff, bandwidth and internet connectivity as having a significant impact on the development of e-learning at the institutes of higher learning.[30]

Twelve factors were uncovered among the 64 factors discovered, as top barriers to e-learning such as; increased time commitment, lack of money to implement e-learning program, organizational resistance to change, lack of shared vision for e-learning in the organization, lack of strategic planning in organization, lack of classroom enhanced classroom or infrastructure, slow price of implementation, lack of grants, lack of technical support, difficult to convince stakeholders of the benefits and lack of support staff to help course development.[31]

In an article entitled 'from resistance to acceptance and use of technology' twenty discrete resistance factors likely to be found in a variety of circumstances, as barriers to the successful transformation to e-learning such as; lack of ownership, lack of top brass support, lack of benefits, lack of recognition, increased burdens, loneliness, insecurity, norm incongruence, boredom, chaos, superiority, differential knowledge, sudden wholesale change, fear of failure, extremes of organizational structure, suspicion, ambiguity, lack of leadership skills, lack of inertia and lack of referent power.[32]

In accordance with another study, most e-learning at the institutes of higher learning is initiated without having considered an effective pedagogical approach and in turn affect the learning process[33]. It is reiterated that most online tutors delivered the module of e-learning without adequately reflecting on how to construct and run the program over the internet. It goes without any doubt to say most institutes of higher learning have not realized the full potential that e-learning could bring to learning as a result of overemphasizing on the use of technology as opposed to the use of pedagogical approach and use of change management techniques is overly ignored in the process.[34]

Several challenges were identified concerning the integration of information communication technology with teaching, learning and assessment as follows[35];

1 The inertia regarding the behaviour of people resist change
2 Negative attitudes, absence of awareness and underestimation of information technology
3 Absence of systematic approach to implementation and post-implementation follow-ups
4 High rates of non-compliance with the system
5 Shortages of user training
6 Lack of end-user support in relation to administrative and technical support
7 End user not happy with the new system
8 Discrepancies of technologies, the context, culture and working practices.

E-learning can be regarded as a significant innovation at the institutes of higher learning in Botswana and in developing countries. Innovation was defined as an idea, practice or object that is perceived as new by an individual or a unit of adoption. The following are the five characteristics of an innovation that affects its rate of adoption36;

1 Relative advantage
2 Comparability
3 Complexity
4 Trialability
5 Observability

Relative advantage is the degree to which an innovation is seen as better when compared to an idea it has overtaken for example comparing e-learning to traditional learning habits at the institution of higher learning. Comparability is the degree to which an innovation is seen as being consistent with the existing values past experiences and needs of would-be users. Complexity as the extent to which an innovation is seen as difficult to use and understand.Trialability as the extent to which an innovation can be experimented with on a restricted basis. Observability as the extent to which the results of the innovation are visible to others. It was further suggested that innovations with high relative advantages, comparability, trialability, observability and less complexity will be adopted more quickly than others.[36]

In another study barriers to successful adoption of technology were classified as emanating from an

internal and external source. Internal barriers were summarized as teacher's attitude or perceptions about technology. External barriers included the availability and accessibility of necessary software and hardware, the presence of institutional and technical personnel support and a program for skill building and staff development. Barriers that cross internal and external were identified as lack of funding and time.[37]

Best Change Management Techniques for the Successful Transformation to E-Learning.
In the article "use e-learning to revolutionize change management" it was stressed that in order to use e-learning to revolutionize change management the best practice change management technique is to assume a servant leadership role, that is leading by serving through empowerment, mentorship and support as opposed to micro-tasking and absolute authority.[38]

It was postulated that there is a need to include tutors and teaching heads in the decision-making process, for e-learning to be successfully implemented.[39] In addition, several authors regarded support and leadership from top management as a critical success factor for the successful implementation of e-learning at the institutions of higher learning.[40]

Another study it was revealed that both learners and tutors preferred blended learning approach as it combines face to face traditional methods with online collaborations involving the learner.[41] In Europe, the Lisbon Council in the year 2000, regarded digital learning as a necessity in the knowledge community and a mandatory instrument for adapting education and training systems to it, since then Europe has gained extensive experience in the use of ICT at the institutes of higher learning in Europe.

Another study it was proposed that the transition to e-learning involves five stages such as; lone rangers, encouragement, chaos, planning and sustainability. The lone rangers are regarded as the early adopters of e-learning and e-learning is introduced through the individual initiatives of faculty members or instructors without immediate support from the Institute of higher learning. Under encouragement, the initial efforts of the lone rangers are backed by the administrators of the institute of

higher learning through the provision of small grants or by reduction of the teaching load. For chaos, e-learning is embraced by an increased number of instructors and administrators begin to feel worried about issues of quality, support standards and the coverage costs to be involved. For planning, priorities are established by top management with regard to technical standards, design, support and training for faculty members. Finally, under sustainability, the institution of higher learning would have established a stable system that is cost effective and feasible. A few institutions have attained the sustainability stage.[42]

It was reiterated that the successful implementation of information communication technology relies on the extent of the management of the change itself which is demanded by the new technologies.[43] It was further deduced that barriers to technological adoption could be overcome by effective management change, appropriate support of the users and ensuring incentives exist to motivate the adoption.[44]

It was postulated that literacy in digital skills is necessary for mindful and effective learning in contemporary digital environments.[45] It was proposed that a focus on e-learning literacy is key to overcoming the digital divide.[46] It has been cautioned that the e-learning initiatives without the consideration of the paradigm shift and without the implementation of the required infrastructure with reliable supporting mechanism would threaten developments in e-learning.

It was revealed that the best approaches of changing to e-learning were to focus the change on administration, curriculum, didactic, organizational, systemic, cultural and ideological.It was further recommended in the same study that the approaches be physically implemented through agnostic, conservative, moderate, radical, extreme radical attitudes towards the e-learning development and implementation trajectory.[47]

It was revealed that the best practice transition process from traditional learning habits to e-learning comprise of; endings, the neutral zone and beginnings. However many institutions fail to address these stages as appropriately required. The endings involve the replacement of instructor-led training.

The neutral zone regards change as "journey" and the learners being exposed to four phases of change involving denial, resistance, exploration and commitment. The beginnings have leverage concept requiring direct communication with those impacted by the e-learning initiative.[48]

In addition, it was stressed that a strategy for e-learning should define how it enhances teaching itself and students learning. E-learning is regarded as a change itself and that it is not the organization that changes as a result of the implementation of e-learning initiatives.[49]

It was propounded that the importance of agreeing on the purpose of e-learning, through the achievement of a consensus of the institution, for the purpose of building a common understanding. Common understanding and definitions for online learning enabled learning, asynchronous learning, synchronous learning, multimedia and learning management systems should be discussed and agreed by all stakeholders.[50]

Further, it was propounded that the best practice change technique to e-learning is to achieve perpetual change through sharing of knowledge involving a collaborative approach in such a way that facilitates and afford the process of change in organizations and people.[51] Capacity building was pronounced as the heart of change management and it was further observed that the possession of skilful employees, having the right technology and content does not lead to success in e-learning.[52] It was recommended that the training of deans and staff was key to the successful transition to e-learning, as they become competent facilitators of e-learning.[53]

The following approach was recommended which ensures the successful implementation of e-learning in an organization based on the steps below[54];

1   E-learning goals must be linked with business goals
2   Top management support must be sought
3   Information Technology(IT) Department must be worked with to develop an understanding of the baseline technologies
4   IT department must be worked with to establish standards of working together
5   A plan should be created to help the training department to handle the change
6   E-learning specifications should be determined
7   Determine how results will be measured
8   A rollout plan should be prepared

It was suggested that a strategy for e-learning should define how e-learning enhances student learning and teaching processes. It is further recommended that any change strategy should be assessed on its appropriateness to the processes and the organization[55] In addition, it is reiterated that the best practice of using e-learning system is to adapt the processes adequately to the characteristics of the learning subjects, student skills and the needs of the job.[55]

It was indicated that making use of the applications of information technology in the learning environments depends on e-learning quality exposed to students, teachers and administrators, that e-learning initiative should be compatible with contextual and human factors in any particular country for it to be successful.[56] It is further advised that institutes of higher learning should pursue a blended approach in the delivery of the curriculum as a priority of initiatives of implementing e-learning as it will result in an environment that is sustainable and trusted.[57] The effective integration of e-learning does not merely depend on the technology, but it is regarded as a complex and multifaceted process that involves institutional e-readiness, pedagogy, curriculum, teachers' digital e-readiness, consistent financing per se.[58]

In addition, it was proposed that the creation of e-learning environments would transform user resistance into a collaborative workplace.[59] It was further discovered that the implementation of one complete curriculum requires significant resources such as computers and is dependent on the reliability of internet connectivity and it takes a long time.[60] In addition, it was suggested to administrators that they must realize the impact that e-learning will have on the organizational culture and provide the faculty members with opportunities for professional development.[61]

The following ten commandments of executing change were developed in the view of change management[62];

1   Analyzing the organization and its need for change
2   Creating a common direction and shared vision
3   Separation from the past
4   Creating a sense of urgency
5   Support a strong leader role
6   Line up political sponsorship
7   Craft an implementation plan
8   Develop enabling structures
9   Communicate, involve people and be honest
10 Reinforce and institutionalize change

Finally, it was deduced that change management comprises of four strategies commencing with rational empirical strategy, normative reductive strategy, power coercive strategy and environmental adaptive strategy. The rational-empirical strategy focuses on offering incentives that appeal to human self-interest. The normative-reductive strategy believed that people prefer social and culturalnormality and redefining of these will ensure commitment to the desired values through communication. The power-coercive strategy envisaged that people will act as they are told based on the exercise of authority followed by the imposition of penalties whenever necessary.[63]

Critical Analysis and Discussions

The benefits of e-learning outweigh the cost of its implementation as was postulated by Unwin (2008) and its potential in developing countries has been evidenced by the transformation of countries in Southern Africa into knowledge economies, as it is scalable and greatly reduces costs. The case in Botswana is supportive of this fact as learners at both the institutes of higher learning can afford to learn anywhere and at any time and most can combine family life with e-education. Traditional learning methods are fast being replaced by e-learning as it is no longer conducive for the contemporary digital based world.

The majority of the obstacles to e-learning in early 2000 were with regard to cost, insufficient employees and academic staff skills and were more on a personal perspective, including such impediments as the difficulties of changing the behavior and culture of the persons that were affected by the transition to e-learning. However, over the years Anderson *et al.,*(2010) and Smith in 2015 asserted that most factors resisting the change were, lack of employees' participation, lack of an effective communication strategy, an inappropriate culture in planning, an unknown state of the organization, complexity of the organization and the degree of sophistication of information communication used. However, most of these findings failed to address the impediments to e-learning relating to changing the attitudes and mind set of both the learners, administrators and academic staff upon which is the most difficult to change.

The most common approaches that were recommended by different writers, for example, Vrana (2007) and Mackenzie *et al.,* (2004) were institutions of higher learning to adopt a collaborative approach to the transition to e-learning as well as to adopt a perpetual change for the successful transformation to e-learning. However many authors such as Kanter *et al.,* (1992), Mackenzie (2004), Laura (2004), Pervenance (2008) and Brandon (2007) came up with a prescriptive logical approach to change having interlocked stages of the transition, that are important but lacks the means of changing the attitudes and mindset of stakeholders involved in the change which are critical success factors to enable a successful transformation to e-learning.

The recommendations by several writers mostly lack in a fundamental way the techniques and the effective means of overcoming the impediments of a successful transition to e-learning and hence this study focused more on unveiling the best practice employment of change management techniques to the successful transformation to e-learning to avoid the institutions of higher learning maintaining the status quo.

Methodology

A plan of action including specification of resources which lies behind the choice and use of particular methods is regarded as the methodology. The methodology is concerned with all the means of how data would be collected and analyzed. It was further reiterated that the methodology explained the

means by which a researcher would uncover what they believe is out there that needs to be known regarding a particular phenomenon under study.

The methodology that was used for this study was qualitative research. The study used a questionnaire survey which included interview administered questionnaire involving open-ended as well as close-ended questions. The research was conducted in Gaborone based on a purposive random sampling of fifty academicians, academic administrators and students. A purposive random sample is a sample based on the characteristics of the population and the objectives of the study. Purposive random sampling is a non-probabilistic method that was suitable for the study as the research focused on obtaining responses from the academic administrators and users of e-learning excluding non- academic staff.

Qualitative research refers to the type of inquiry in which the researcher carries out research about people's experiences, in natural settings, using a variety of techniques such as interviews and observations, and report findings, mainly in words not in statistics.[64] Qualitative research is the research where studies are set in their natural settings and humans are the essential instruments.[65]

Research Strategy

A case study strategy was employed for this study which fits well with the qualitative methodology at verifying and scrutinizing factors restraining the successful transition from traditional learning to e-learning.

In addition, a case study is regarded as an examination of a particular[66] and an examination of an instance in action.[67] The benefits of using a case study are that they are 'a step to action.[68] They are useful for staff and individual self- development. Further case studies' results, if properly interpreted can be useful in within-institutional feed-back, formative evaluation and policy-making in education.

Further, the case study research strategy can be used;

1   For a context that has specificity or for specific events that are focused on a particular situation.[69]

2   When the organizational settings are social intricate[70]

3   When the contextual meaning is sought by a researcher within a system that is bounded.[71]

4   When research enterprise is inductive theory building.[72]

The study used case study research strategy as it is compatible with the qualitative research methodology at exploring the impediments to the successful transition to e-learning at Botho University (BU) and Botswana Accountancy College (BAC). The study used a case study research strategy since it focused on specific situations and events relating to the barriers to successfully transition to e-learning in Botswana. The findings relied on the respondents' perspectives and experiences in the unique organizational settings of BU and BAC that were socially intricated. Further, the study was based on inductive theory building and searched for contextual meaning of the hindrances to the successful transition from traditional learning to e-learning at BU and BAC. Hence the case study research method was seen fit and appropriate for the study.

The weaknesses of the case study approach are that case studies in most cases are not readily open to cross-checking, they tend to be selective, personal, subjective and biased. In addition, case studies are susceptible to observer bias, because of the nature of the study. The results of the case study may not be generalized, especially, where other researchers do not see their application.[73]

Presentation and Analysis of Results

The following are the results of the survey conducted and followed by an analysis of results for each questionnaire that was completed by participants in the study. The results from the twenty-five participants were depicted in tables for each factor that was investigated as a proportion of the total of the responses obtained from the participants. The data obtained from the respondents were processed using MS-Excel and SPSS.

Table 4.2 Results of the effectiveness of change experience in the transition to e-learning

Change Experience	A-Very	A-Fairly effective	Not a very effective	Not effective effective	Do not know at all
Imposition	8%	35%	31%	11%	15%
Adaptation	46%	42%	12%	0%	0%
Growth	50%	34%	8%	0%	8%
Creativity	58%	27%	13%	0%	4%

Botho University Data Analysis

Interpretation of the Results of the Effectiveness of Change Experience in the Transition to e-learning

On the investigation that was conducted at BU on the effectiveness of the change experience in changing to e-learning, it was noted(Table 4.2) above that creativity (85%), growth (84%) and adaptation(88%) were effective in the transformation from traditional learning habits to e-learning at the institute of higher learning. These findings are in agreement with the findings of Navid, (2009) who propounded that the best change experience to e-learning is to adequately adapt the processes to suit the characteristics of the learning objects, students' skills and the needs of the job. Although imposition was regarded as not effective by 42% of those who participated in the study at BU, however 43% of the participant indicated that it was effective in the transformation to e-learning and this has been found in support of Mackenzie, (2004) power coercive strategy that implies that people will act according to instructions from higher authority when it comes to changing the status quo.

Table 4.3 Results of the impediments of the successful transition to e-learning

Factor	Very big challenge	Fairly big challenge	Not very big challenge	Not a challenge at all	Do not know
Obsolete IT Systems	54%	19%	12%	15%	0%
Economic conditions	46%	27%	12%	12%	3%
Lack of skilled staff	46%	31%	12%	11%	0%
Legal-and-Contractual Factors	8%	50%	15%	19%	8%
Cultural factors	27%	46%	15%	8%	4%
Technophobia	46%	27%	8%	12%	7%
Institutional-bad governance	23%	35%	19%	15%	8%

Interpretation of the Results of the Impediments to the Successful Transition to e-learning

The following results were indicated by the respondents as big challenge for the successful transformation to e-learning at the Institute of higher learning, economic conditions (83%), shortage of skilled staff (77%), obsolete information technology systems (73%), cultural factors (73%), Technophobia (73%), legal factors (58%) and institutional bad governance (58%). The results of the findings are in line with most of the literature reviewed from Masden *et al.,* (2011), Touray *et al.,* (2013), Wanyembi *et al.,* (2011), Nawaz (2011), Zake, (2009) and Susseville, (2004). Further, the findings are in agreement with Samnan Ali, (2018)'s individual barriers, enabling conditions barriers and technological barriers.

Interpretation of the Results of the Effectiveness of Change Leadership Techniques in the Transformation to e-learning.

On the study of the effectiveness of the change leadership in the implementation of change to

e-learning the following scores were obtained with regard to communicating the vision (91%), establishing a sense of urgency (72%), empowering broad-based action(71%), incorporating change in the culture (69%), creating a guiding coalition (68%), never let up (54%), generating short term wins (54%). The results are partly incongruent with Wilson (2016) where the best practice change management technique was to pursue a servant leadership role through empowerment, support and mentorship.

Table 4.6 Results of the effectiveness of change management techniques in the transformation to e-learning

Technique	Very effective	Fairly effective	A Less fairly effective	Not effective at all	Do not know
Education & Communication	73%	27%	0%	0%	0%
Participation & Involvement	73%	26%	0%	1%	0%
Facilitation & Support	69%	30%	0%	1%	0%
Negotiation & Agreement	34%	34%	19%	7%	6%
Manipulation & Co-Option	26%	26%	7%	23%	18%
Explicit & Implicit Coercion	15%	26%	19%	18%	22%

Table 4.7 Results of the impact of change management techniques in convincing stakeholders group in accepting a change to e-learning

Technique	Very huge impact	Fairly huge impact	Not a fairly huge impact	Do not have a huge impact	Do not know
Communication	76%	18%	6%	0%	0%
Education	74%	26%	0%	0%	0%
Consultation	46%	46%	3%	3%	2%
Negotiation	42%	30%	11%	3%	15%
Manipulation	34%	23%	7%	18%	18%
Coercion	19%	19%	22%	26%	14%

Interpretation of the Results of the Impact of Change Management Techniques in Convincing Stakeholders Group in Accepting Change to e-learning

The following techniques were uncovered as having a huge impact on convincing various stakeholders in accepting the e-learning initiatives, education (scored 100%), communication (scored 94%), consultation (scored 92%), negotiation(scored 72%), manipulation(scored 57%) and coercion(scored 38%). These results of the study are in line with the findings of Christopher, (2015) that lack of effective communication and lack of employee involvement were among the barriers to an effective transformation to e-learning.

Interpretation of the Findings

The following were regarded as the best practice change management technique to new learning habits, developing a change vision & communicating the vision (scored 98%), empowering broad based action (scored 94%), creating a guiding coalition (scored 88%), establishing a sense of urgency(scored 81%), incorporating change in the culture (scored 80%), generating short-term wins (scored 71%) and never let up (scored 68%).

Botswana Accountancy Data Analysis

The following results were obtained from the twenty-five respondents who participated in the questionnaire survey at Botswana Accountancy

College BAC. For each factor investigated, the results were reflected in the underlying tables below. An analysis of the results follows the outline of the tables.

Table 4.8 Results of the best practice change management techniques to new learning habits

Technique	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to Disagree	Strongly agree
Establishing a sense of urgency	65%	26%	7%	3%	0%
Creating a guiding coalition	50%	38%	6%	3%	3%
Developing a change vision& Communication of the vision	76%	22%	2%	0%	0%
Empowering broad based action	76%	18%	6%	0%	0%
Generating short-term wins	38%	33%	22%	7%	0%
Never let up	34%	34%	26%	3%	3%
Incorporating change in culture	57%	23%	14%	3%	3%

Table 4.9.1 Results of the effectiveness of the change experience in the transformation from traditional learning habits to the new learning habits

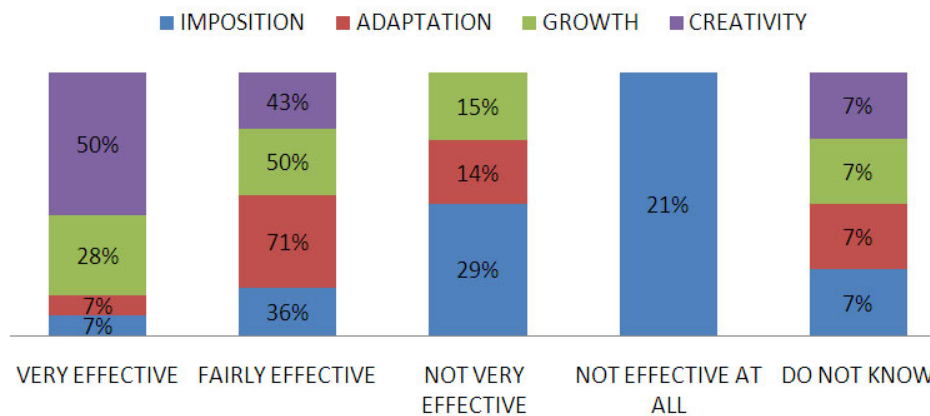| Change Experience	A-Very effective	A-Fairly effective	Not-a-very effective	Not effective at all	Do-not know
Imposition	7%	36%	29%	21%	7%
Adaptation	7%	71%	14%	0%	7%
Growth	28%	50%	15%	0%	7%
Creativity	50%	43%	0%	0%	7%

Chart 4.9.1.1 graphical representation of the effectiveness of change experience in the transformation from traditional learning habits to the new learning habits

Interpretation of the Results of the Effectiveness of Change Experience in the Transformation from Traditional Learning Habits to the new Learning Habits

At BAC creativity (93%) was noted as the most desired effective change experience of the transformation to e-learning, followed by adaptation and growth with both a score of 78% and the least

was imposition which was regarded as effective by 43% of the respondents. The findings at BAC are also in agreement with those at BU above. The results at BAC is in line with the findings of Bates, (2000) that e-learning should be introduced through the individual initiatives or creativity without the immediate support from the Institute of higher learning at the preliminary stage of a lone ranger.

Table 4.9.2 Results of the impediments to the successful transformation to e-learning

Factor	A very big challenge	A fairly big challenge	Not a very big challenge	Not a challenge at all	Do not know
Political	8%	28%	28%	28%	8%
Obsolete IT Systems	22%	22%	43%	13%	0%
Economic conditions	21%	29%	43%	0%	7%
Lack of skilled staff	21%	43%	28%	7%	0%
Legal and contractual factors	21%	14%	7%	35%	21%
Cultural factors	7%	22%	57%	0%	14%
Technophobia	28%	14%	22%	28%	8%
Institutional bad governance	21%	28%	28%	14%	7%

Interpretation of the Results of the Impediments of the Successful Transformation to e-learning

Shortage of skilled staff was noted as a big challenge with 64% of respondents in favour of it, followed by economic conditions with 50%, obsolete IT having 44% and technophobia 42%. The least challenging

factor in resisting the change was cultural factors with 29%. This is also in agreement with Baldwin and Lin, (2002) who unveiled five groups of impediments to the transition to e-learning as cost, institution, labour, organization and information related.

Table 4.9.3 Results of the cultural impediments to the successful transformation to e-learning

Factor	A very big challenge	A fairly big challenge	Not a very big challenge	Not a challenge at all	Do not know
Power structures	29%	29%	28%	14%	0%
Symbols	7%	8%	57%	14%	14%
Organizational structures	21%	50%	0%	28%	0%
Control Structures	21%	36%	15%	28%	0%
Rituals and Routines	21%	7%	28%	36%	8%
Stories	14%	14%	36%	28%	8%

Interpretation of the Results of the Cultural Impediments of the Successful Transformation to e-learning

At BAC organizational structures (71%) were noted as challenges at the restraining change to e-learning, followed by power structures (58%)and control

structures(57%). The least factors with challenges to the transformation to e-learning were symbols with 15% followed by rituals, routines and stories both with 28%. This finding is in line with Beamish, (2002) who revealed that cultural resistance as the significant barriers to e-learning.

Table 4.9.4 Results of the effectiveness of change leadership techniques in the transformation to e-learning

Technique	A Very effective	Fairly effective	A Less fairly effective	Not effective at all	Do not know
Establishing a sense of urgency	22%	64%	7%	7%	0%
Creating a guiding coalition	15%	64%	21%	0%	0%
Development of vision and Communicating the vision	42%	35%	15%	8%	0%
Empowering broad- based action	22%	57%	14%	0%	7%
Generating short-term wins	7%	50%	28%	15%	0%
Never let up	7%	28%	50%	0%	15%
Incorporating change in the culture	28%	50%	7%	15%	0%

Interpretation of the Results of the Effectiveness of Change Leadership Technique in the Transformation to e-learning

The following change leadership techniques were regarded as effective by the respondents at BAC, establishing a sense of urgency(scored 86%), both empowering broad based action and creating a guiding coalition (scored 79%), followed by incorporating change into the culture(scored 78%) and development of the vision & communication of the vision was indicated as 77% effectiveness.

The least that were regarded as effective were generating short term win (scored 57%) and lastly never let up was considered by 35% of the respondents as effective. This finding is somehow in line with Mackenzie *et al.,* (2004) who propounded that the best practice change to e-learning was to achieve a perpetual transition through sharing of knowledge involving a collaborative approach in order to facilitate the process of change in people and organizations.

Table 4.9.5 Results of the effectiveness of change management techniques effective in the transformation to new learning habits

Technique	A Very effective	Fairly effective	A Less fairly effective	Not effective at all	Do not know
Education and communication	35%	58%	0%	0%	7%
Participation and involvement	50%	36%	7%	0%	7%
Facilitation and Support	28%	36%	28%	0%	8%
Negotiation and agreement	29%	29%	35%	0%	7%
Manipulation and co-option	0%	35%	35%	22%	8%
Explicit and implicit coercion	14%	35%	8%	22%	21%

Interpretation of the Results of the Effectiveness of the Change Management Techniques in the Transformation to New Learning Habits

The results obtained from the survey at BAC indicated that education and communication and participation and involvement were regarded as effective by 93% and 86% of those who participated in the survey. The least popular were manipulation and co-option with 35% of the respondents indicating that it was an effective technique to be used when transforming to e-learning.

Table 4.9.6 Results of the impact of change management techniques in convincing stakeholders groups in accepting a change to e-learning

Technique	Very huge impact	Fairly huge impact	Not a fairly huge impact	Do not have a huge impact	Do not know
Communication	71%	29%	0%	0%	0%
Education	42%	42%	16%	0%	0%
Consultation	50%	50%	0%	0%	0%
Negotiation	28%	50%	14%	8%	0%
Manipulation	7%	0%	35%	50%	8%
Coercion	0%	50%	21%	21%	8%

Interpretation of the Results of the Impact of Change Management Techniques in Convincing Stakeholders Groups in Accepting a Change to e-learning.

The following were regarded as having a huge impact at convincing stakeholders to transform to e-learning communication (scored 100%), education (scored 84%), consultation (scored 100%), negotiation (78%) and coercion (50%). Coercion (scored 7%) was the least popular as an effective technique at convincing stakeholders' group to change to e-learning. This is in line with the findings of Aaron *et al.,* (2004) that the successful implementation of the change to e-learning would depend on the degree of the management of the change itself which is demanded by the change itself.

Table 4.9.7 Results of the best practice change management techniques in the transformation to new learning habits

Technique	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to Disagree	Strongly agree
Establishing a sense of urgency	35%	42%	8%	15%	0%
Creating a guiding coalition	36%	64%	0%	0%	0%
Developing a change vision& Communication of the vision	35%	50%	15%	0%	0%
Empowering broad based action	11%	50%	14%	0%	15%
Generating short-term wins	15%	51%	26%	8%	0%
Never let up	21%	14%	57%	0%	8%
Incorporating change in culture	43%	43%	7%	0%	7%

Developing a change vision (98%), empowering broad based action (94%), establishing a sense of urgency (91%), creating a guiding coalition (88%), incorporating change into the culture (80%), generating short-term wins (71%) and never let up (68%) were agreed upon by all respondents as the best practice change management techniques in the transformation to e-learning. These findings are in line with the findings of Kanter et al., (1992) who developed the ten commandments of executing change as creating a common direction and shared the vision, including creating a sense of urgency, developing enabling structures and reinforcement and institutionalization of the change.

Interpretation of the Results of the Best Practice Change Management Techniques in the Transformation to e-learning
Key Findings, Conclusions and Recommendations
Key Findings
The key findings of the study were that;

1. Adaption (88%), growth (84%) and creativity (85%) were unveiled as an effective change experience technique in the transformation to e-learning from traditional learning habits. The results are an agreement with the assertions of Qureshi *et al.,* (2009), Slusky, (2009), Mackenzie, (2004), Rosenberg, (2007), Engelbrecht, (2003) and Mcquiggan, (2012).

2. Economic conditions (83%), lack of skilled staff (77%), obsolete IT (77%), cultural factors (73%) and technophobia (73%) were regarded as a challenge in the transformation from traditional learning methods to e-learning. These findings are in tandem with the proclamation of Wanyembi, (2011), Zake, (2009), Ssekakubo *et al.,* (2011), Touray *et al.,* (2013), Rhema *et al.,* (2010), Moershell, (2009) and Berge *et al.,* (2001).

3. Power structures (57%), organizational structures (54%) and control structures (52%) were regarded as the key cultural factors that are a challenge and restrain the successful transformation from traditional learning habits to e-learning. The results support the findings of Moershell, (2009), Rhema *et al.,* (2010) and Touray *et al.,* (2013).

4. Development of the vision &Communication of the vision (91%), establishing a sense of urgency (72%) and empowering broad based action (71%) were considered as effective at the implementation of change from traditional learning habits to e-learning. The results are in accordance with the findings of Brzycki and Dudt, (2005) and Wilson, (2016).

5. In addition, the combination of education and communication (100%), participation and involvement (99%), facilitation and support (99%) were viewed as effective in the transformation from traditional learning methods to e-learning. Communication (94%), education (74%) and consultation (92%) were regarded as the key techniques and have a huge impact on convincing the various stakeholder's groups in accepting the change from traditional learning habits to e-learning. The best practice change management techniques to e-learning that were agreed upon developing a change vision & communication of the vision (98%), empowering broad based action (94%), creation of a guiding coalition (88%), establishing a sense of urgency (81%) and the incorporation of change in the culture(80%). Generating short-term wins (71%) and never let up (68%) were also noted as the best practice use of changing from traditional learning methods to e-learning at the institutes of higher learning. All these findings support the findings of Kanter *et al.,* (1992), French, (2006), Engelbrecht, (2003) and Pervenance, (2008).

Conclusions
The following conclusions were with a bearing on the objectives of the study.

The Barriers Against the Successful Transformation from Traditional Learning Habits to e-learning
It can be reiterated that for the effective transformation from traditional learning habits to the new learning habits in the institutions of higher learning economic conditions with regard to the state of the economy at any point in time act as an obstacle to the successful transformation from traditional learning methods to e-learning in the institutes of higher learning in Botswana. Shortages of skilled staff, obsolete IT systems as well as cultural factors and fear of new technology were regarded as the significant impediments to the successful implementation of an e-learning project at the institutes of higher learning in Botswana. The following cultural factors were also identified as restraining the successful transition to e-learning, power structures, organizational structures and control structures.

The best practice Change-Management Techniques to the Successful Transformation from Traditional Learning Methods to e-learning at the Institutes of Higher Learning.
A well planned, collaborative approach involving all the stakeholders should be used to effect the change successful from traditional learning methods

to e-learning in the institutions of higher learning. The following techniques were regarded as the best practice change management techniques to be used successfully in convincing the various stakeholders to accept the change to e-learning, education and communication, participation and involvement, facilitation and support including negotiation and involvement.

The best Practice Change-Leadership Techniques to be used by Administrators of the Institutes of Higher Learning to Afford the Successful Transformation to e-learning

The best practice change management leadership techniques of the successful implementation to e-learning were noted as the establishment of a sense of urgency, creating a guiding coalition, development of change vision, communication of the vision, empowering broad-based action, generating short term wins, never let up and incorporating change into the culture.

Lastly, any e-learning initiative should be brought about after having incorporated an effective pedagogical approach in order to facilitate the learning process.

Recommendations
Recommendations to the Administrators of the Institutes of Higher Learning

The following are the recommendations to the administrators or the policymakers that would facilitate a successful transition from traditional learning methods to e-learning;

1   Adaptation, growth and creativity are the effective change experience that is predominantly preferred by most stakeholders in the transition to e-learning from the traditional learning habits. Imposition is to be the least to be considered in enabling an e-learning initiative from traditional learning habits at the institutes of higher learning as it is fraught with uncertainty.

2   The institutions of higher learning must be institutionally ready for the implementation of the e-learning initiative with regard to resources such as an adequate infrastructure, realignment of cultural factors, relevant training of staff, students' motivations and the top management of the institutions of higher learning should be committed to the success of the e-project.

3   The power structures, organizational structures, control structures, symbols and myths, rituals and routines should be realigned and be adapted to the e-learning initiatives in such a way that there is no contradiction to the change initiatives once it has been started.

4   The governance of the institutions of higher learning should predominantly follow a servant leadership or bottom-up approach after having established the sense of urgency of the e-learning initiatives and with the effective communication of the vision and including empowering an agent or guiding coalition to take charge of the transition from traditional learning methods to e-learning.

5   Once the transition has succeeded never let up should be reinforced through the appointment for example of change champions, in order avoid back slippage to the traditional ways of teaching learning and assessment otherwise, the status quo will be maintained.

6   Education and communication, participation and involvement, facilitation and support including negotiation, agreements and consultations should be the pillars for continuous improvement throughout the process of change, from the time of planning of the e-learning initiative, up to the successful transition to the new learning habits and at post implementation of the e-project. The use of coercion should be kept to a minimum unless resistance to change is unjustified.

7   All the restraining forces or impediments of the change should be transformed into collaborative forces in favour of the change to e-learning in order for the change to be successful.

Conflict of Interest

The author declares no conflict of interest.

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