

A Conceptual Framework of the Implementation of E-Learning in University of Business and Technology (UBT)

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Abstract- This preliminary study discusses the implementation of an E-learning program at the University of Business and Technology (UBT) in Saudi Arabia – Jeddah. The program originally aimed to establish a virtual university which offers totally online courses but due to a number of reasons there had to be some changes in the implementation process as well as the changes and challenges faced by UBT in implementing its E-learning program from an Information System (IS) project management point of view. Findings suggest that implementing such projects needs careful consideration of a variety of issues to ensure that the objectives are achieved. The case provides rich insights to other educational institutions wishing to implement such projects. The outcomes will assist in its continuing implementation at other universities in the future.

Index Terms- E – learning, Information Systems / Information Technology (IS/IT) projects, project management phases, UBT.

I. INTRODUCTION

Higher Education Institutions (HEIs) in the era of knowledge revolution faces different challenges as a result of the enormous achievements in the area of information and communication technology (ICT), that led to the erosion of boundaries among countries and makes the world a small village in the context of globalization and economic openness. Quality of education leads to increased investment, and create a well – qualified human resources. As a consequence, governments and private sector takes various approaches to delivering e - learning services and technologies. Some manage e - learning services through central information technology (IT); others provide e-learning services and technologies centrally; some have blended learning programs in which face – to – face instruction is combined with electronic usage applications to deliver courses (1).

E-learning is a controversial phenomenon, thus, the need for and significance of a strategic approach to implement and utilize of e – learning in HEIs has been of attention of considerable researchers. But actually what is meant by "e-learning"? . It is very difficult to find a common definition of this term, however, we will mention some of those definitions, (Dublin, 2003: 2), e-Learning is "the delivery of a learning, training or education program by electronic means, e-learning involves the use of a computer or electronic device (e.g. a mobile

phone) to provide training, educational or learning material" (2). The European Commission (2001) describes, e-Learning is "using new multimedia technologies and the Internet to improve the quality of learning by facilitating access to facilities and services as well as remote exchanges and collaboration" (3).

Successful implementation of e - learning and the selection and delivery of e - learning services and technologies depend on factors such as university size, vision, mission, and the priorities of university top management. The significance of e - learning for evolution has paved the way for launching several programs at a whole levels of educational body in a number of developing countries at schools and higher education institutions (HEIs) alike.

These transformations of the learning patterns present several challenges when implementing e - learning environment, namely three main challenges: technology, content, and staff. These aspects require be managing and implementing effectively to fulfill the overall enrichment of the staff and students learning experiences, which are improved through the appropriate usage of technological blends.

According to (Donoghue et al., 2003) experience indicates that implementing e-learning programs is still facing a numerous difficulties such as, performance, cost, and technology access especially in developing countries, questioning the benefits obtained by students, role of teachers, information ownership, availability of resources (modern technology and information), social inequalities and the actual benefits of accessing education online (4).

Finally, this study explores the implementation of e – learning at UBT in Saudi Arabia – Jeddah. This study will follow a case study approach. It is argued to be the suitable approach if the questions being answered are how and why questions (5), this case study can be categorized as an "interpretive case study", the aim of which is not to tell the "reality", but to tell a narrative which consists of the researcher's ideas and thoughts in connection with the phenomenon in question (6).

In this study, we aim to analyze an e- learning project according to its phases, the obstacles facing its implementation and the changes that have to be carried out. In sum, this study highlights on the processes by which it is being implemented from a project management point of view in order to assess the e-learning project. This study is structured as follows: it starts by providing the theoretical foundations that will be used as a nucleus to analyze this case. Then, presents the case study and analysis related issues. Thereafter, discuss the case based on the

above theoretical framework. finally, conclusions of this paper are discussed, recommendations for future research is drawn in the last section.

II. PREVIOUS STUDIES

The e-Learning has become increasingly importance in HEIs. The development and presenting of a diversity of e-Learning tools has been bring out great modifications in HEIs, particularly with respect to their educational delivery and support processes.

The e – learning primary components include: The use of: online technologies (Internet and Web tools) in learning processes; learning technologies to promote the learning experience teachers and students alike; digital tools for assessment, curriculum delivery, ongoing professional development, collaboration and interaction.

For survival, higher education institutions'(HEIs) needs to consider cost – effective and efficient methods of operations. Certainly, the technology plays a key role in e – learning implementation in HEIs, but alone may not be answers to all of the universities problems. The benefits of utilising technology, particularly for developing online collaborative activities are well documented (7) . Relationships can also be fostered within the context of an online environment. Technology is a powerful medium particularly for part time work based students who find erratic attendance requirements and study difficulty (4).

Researchers believe that the goals of introducing e - learning process, either by facilitating many of the challenges that face instructors and learners daily; or by presenting opportunities that might have not existed before (8).Information and Communication Technologies(ICTs) are transforming the educational experience by affecting education in many ways (4).Therefore, the use of technology in the learning and teaching process is spreading widely at all levels of education both in developing and developed countries. The ease of access to education provided by ICTs makes it a viable option to provide better education to people who may have been otherwise deprived from such opportunities (9).

E – Learning is fully part of our learning environment and no longer an add-on to traditional pedagogies. It is integrated in the way we live, work, and teach and has been so since mid – 2000 as Web 2.0 – the Read Write Web[(10); (11)], acknowledged that in implementation of E – learning, institutions will bear the risk of destroying those processes that offer important forms of support to students. Ultimately, it is possible that standardising a number of informal support systems will create competitive advantage – exactly the opposite to what the process sets out to achieve. Thus, HEIs need to consider the implementations for everyone involve before implementing any new e – learning strategies.

E – learning is described as the use of electronic technologies in learning, teaching, and research.it provides a set of different tools to enhance the learning experience, such as LMS (Learning Management System), CMS (Content Management System), interactive courses contents, digital libraries, virtual classrooms – learning can be applied in classroom based, instructor lead learning or computer / internet

based learning, or both classroom and computer (blended education).

Recent literature in this area has discussed a number of issues related to e-learning. For example, indications of a bias show in student evaluation of teaching against online instruction compared to face-to-face instruction (12).Other studies discussed issues that are important for student satisfaction within online instruction such as: interaction among students, quality and timely interaction between students and professors, consistent course design across courses, technical support availability, flexibility of online courses (13), in addition to providing support for lecturers in implementing computer-supported learning strategies within their classes (14).

E- Learning will ideally be employed by higher education institutions for reasons of enhancing the individualization of instructions, improving educational quality, increasing access, reducing costs, and sustaining innovations (15).E- Learning is designed to create environment rich of interactive applications based on computer technologies and the World Wide Web (WWW) for information, and enables the learner to access learning resources at any time and from any location. Many proponents of E – learning believe that everyone must be equipped with basic knowledge in technology, as well as use it as a medium to reach a particular goal.

Now the word E – learning has transcended the traditional definition of "education through internet only". The E- learning process is like an umbrella, under which lots of things are arranged to make the global education system more uniform, cost – effective and quality – rich. Broadly speaking E- learning is a process of training for all types of learners in their required fields through Information Technology (IT) Techniques.

The E - learning process includes courses from technology to art of living. There is a number of e - learning companies working around the world, the scope and objective of E – learning for all these companies vary and it largely depends upon the types of service offered by the E – learning process. We are going to discuss some features of this process (16). As a result, institutions of higher education have taken positive steps to focus on electronic learning (E – Learning) technology to improve educational efficiency and effectiveness.

Because of the flexible nature of e-learning and since it provides the right information in right time and in right place, students are now more familiar and feel more comfort in this new education system. Saudi universities compete to provide a rewarding learning experience for their students, and some of them have set the path to include distance students as well. A long with the new regulated approach of approving online courses by the ministry of higher education, UBT has to adopt and apply e – learning to enhance the educational experience inside its campuses and outside as well.

III. THEORITICAL FRAMEWORK – PROJECT MANGEMENT PHASES

A project is a comlex,unique,one time effort,with specific limitations (budget , time, resources, and performance) designed to meet organizational goals or customer needs (17). Each project consist of a number of different phases that form what called the

project life cycle .Project management is concerned with providing project managers with new tools that improve their ability to plan, implement and manage activities to accomplish specific organizational objectives (18).

There are a number of different lifecycle models in project management literature, most have four or five phases, but some have nine phases or more (19) . A project is normally divided into a series of phases called the project life cycle model, which

could be conducted sequentially or in parallel.In this study, we utilized the simplest four – phase life cycle model of Gray and Larson (2008),namely (**Defining,Planning,Executing,**and **Delivering**) (20),which is shown in (**Figure 1**) and each phase is discussed briefly below.

Figure (1) : Project Life Cycle

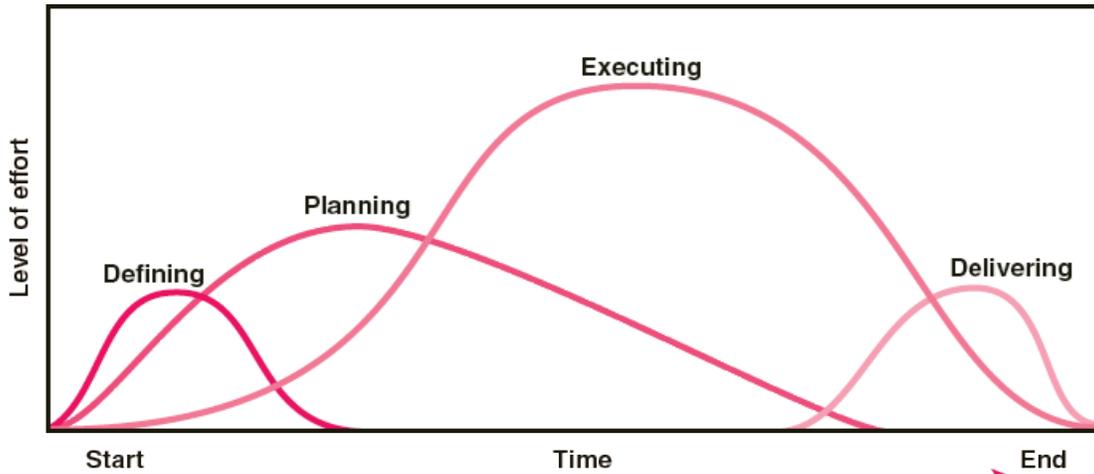


Figure 1: Project Life Cycle framework (Gray and Larson 2008)

DEFINING PHASE:This is the first phase of the project Life Cycle where it's evaluated, selected, and defined well. This phase is about identifying project vision, mission and goals; specifications; tasks; and responsibilities. In addition to that it includes establishing project initiation committee; plan; management procedures; project management environment; and developing project chart.

PLANNING PHASE:In this phase, the project concept is verified and developed in to a workable plan in order to start implementation. This involves Schedules; budgets; estimating resources and creating resource plan ; identifying and assessing risks and alternatives, feasibility, estimating staffing and also certain management activates are carried out to assure that the project established with clear reference terms and substantial structure.

EXECUTING PHASE:Executing consists of the processes used to complete the work defined in the project management plan to accomplish the project's requirements. This is the phase in which the deliverables are physically built and presented to the customer for acceptance. While each deliverables is being constructed, a suite of management processes are undertaken to monitor and control. These processes include many sub - phases \ activities such as management time, cost, changes, forecasts quality, risks issues, suppliers, customers and communication project status.

DELIVERING PHASE: The focus of this phase is to bring the project to a successful end and the formal acceptance, where the project process is completed and documented and the responsibility moved from the developers to owners and users. Administrative activities include the archiving of the files and documenting lessons learned for future projects. This phase

involves finalize all activities across all of the processes, terminating suppliers contracts; obtain approval to close the project. In addition to customer training, documents transfer, release resources, release staff, and lessons learned.

IV. CHANGE MANAGEMENT IN IS PROJECTS

Change management is a process that helps organizations in the implementation of an appropriately planned change (21).Change management of IS projects is understood as activities, processes, and methodologies that support employee understanding and organizational aspects during the IS projects (22).Change management refers to all activities associated with the interaction of technology, processes, and people (23).Academic research has shown that it is not the technology that provides an organization with a success, but the integration of technology into an organizational change management process (24). A successful IS project requires, among other things, a human resource strategy to improve the necessary employee skills and their engagement in the process of change management (25).

The management of change is an important discipline in today's ever changing environment. Change is never easy, and managing it in a large corporate environment is even more challenging. Based on the relevant literature, change can only be effectively implemented through proper planning and communications. Technological change can affect the learning experience in profound ways, but the direction of change depends more on the historical event technological invention, and the diversity of business needs and opportunities.

In order to implement the powerful and widely used learning management systems(LMS),and software systems for managing projects,we must have an integrated information models of those projects. An Information System – Technology (**IS / IT**) project has unique attributes that give such projects a different nature from other projects. **IS/IT** project can differ in terms of project size, project complexity, ambiguity in project requirements, products produced, environment, resource requirements, skills of project team, the cost and benefits sides of the project which usually include many intangible and unexpected costs and benefits, in addition to rapid change in the technology used within these projects which brings more ambiguity and uncertainty in the project outcomes. Consequently, **IS/IT** project managers need to consider different factors due to the unique environment of these projects (26).

Due to the above factors, change in **IS/IT** projects is a normal and complex organizational concept. It is argued that no matter how carefully the project is defined through the initiation phase, the scope of most projects is subject to considerable uncertainty and change (27).Furthermore, even if the project is well – planned by the project manager and team for implementation; it is almost certain to be changed before its completion. These changes may result in changing business processes and procedures, creating new roles and responsibilities leading to organizational restructuring, and needing new equipment, human resources, or new skills (28).

There are many basic causes for change in projects such as; project team characteristics (e.g. awareness, qualifications and commitment), rules and regulations, and technological uncertainty. Some changes occur because mistakes were made in the initial assessment as how to achieve given goals, or in choosing a clear vision and goals for the project (29). Technological change is a fundamental factor for uncertainty, or project risks. Other changes result because the users or project team's lack of awareness, qualifications and commitment to the project, in addition to the high turnover. Many of these changes involve people, who are the key to the successful implementation of any **IS/IT** projects. Therefore, managing change is primarily dealing with people issues and involving them at every stage of the project (30).

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For us, the aim of this study has been to shed some light on issues related to e-learning, education, **ICTs** and project management that have been apparent in the implementation of the e-learning project at **UBT**. Such crucial issues still need further research especially in developing countries where

valuable resources are being invested in **ICT** related projects given that education in particular for these countries.

V. **UBT: E – LEARNING PROJECT**

Before presenting the case study of this paper, it is useful to identify the context within which it is placed – Kingdom of Saudi Arabia – Jeddah City. Many countries realized the importance of **ICT** in developing life of an individual and society, and its role in boosting the economy and income for the individual and state.(31), the Kingdom of Saudi Arabia is witnessing noticeable growth and development in all aspects of life, which has led to its progress and prosperity .During the past few years, the Kingdom, has paid increased attention to rapidly growing and fast evolving sectors; one of which is **ICT** sector.

The wise leadership of the Kingdom has realized the vital role of **ICT** in building Information based society, characterized by the production, penetration, and processing information has led to the start of a number of e – learning initiatives both at school and university level. In view of this, came the kind directive to formulate a National Communications and Information Technology Plan (**NCITP**) for the Kingdome to implement it.

The e - learning project at **UBT** is placed within this context in which **ICTs** are becoming as an important means for change and development to eventually transform the kingdom into knowledge – based economy. **UBT** was the first private university to be established in **2012**, with a pioneering role in providing private higher education in business and technology to students in the kingdom. In **2007**, The College of Business Administration(**CBA**) started implementing its e - learning project.

The main objectives **UBT** e - learning project is:(a) to increase the learning and teaching efficiency and increasing flexibility to adopt the changes in the business environment; (b) improve students 'learning process by interactivity and boost their interest in learning where simulations, video projects, mobile learning, and such can be fruitful engagement;(c) enhance the assessment and evaluation process to evaluate students & faculties effectively in a timely manner;(d) provide lifelong learning resources for **UBT** graduates and alumni; (e) extend educational opportunities to those masses missing conventional education because of distance, disabilities ,or age; (f) balance educational opportunities for higher education by distance mode for a big amount of the population, including those in employment and others who wish to upgrade their educational level; and(g) serve the local community in general(Source: www.ubt.edu.sa) .

For **UBT** the project is still ongoing and vision is still to establish 'virtual university 'despite the challenges. Currently established and future plans in **UBT** will help it in establishing full e - learning tools and services, through two phase strategy to implement e - learning project that is responsible not only for implementing the project but also offers opportunities for training, consulting, and development of other projects in the future.

Before stating an e - learning program, any institution needs to have a clear vision of what its aims are and the risks and challenges involved. In addition, human resources, their culture

and the ability to sustain resources once they acquire the necessary know – how is major issue that needs careful consideration. Moreover, many constraints related to higher education laws and regulations within each country need to be considered carefully because the especial nature of the educational process (32).

A very important part of the project for **UBT** was the establishment of the e-learning Centre of Excellence at the University which hosts the most recent technology. It aims to facilitate offering **ICT** enabled education, developing online courses, and in general providing the community with services. **Table (1)** and **Table (2)** summarizes the current and future plans.

VI. DATA COLLECTION

Data collection for case studies may come from a number of sources such as documents, archival records, interviews, and participant's observation (33). In this study primary data is collected through interviewing with some people involved in the project including: the president of **UBT**; and the former project coordinator and current project manager; and the general director of **IT** and communications department. Data collection took place between September and October 2014.

INTERVIEWS: Since the subject of this study deals mainly with human perception and knowledge, the interviews were needed to gain an understanding of chosen subject. In addition, the interviews had all the characteristics of the formal interview. Accordingly, they were arranged in advance; the respondents were contacted by researcher via e-mail prior to the interview. The interviews, therefore, were semi-structured, and the notes were taken which were immediately discussed and summarized afterwards with the permission of respondents. This kind of interview assisted in keeping track of and investigating specific issues about the e-learning.

Three face-to-face interviews were conducted for this study. The interviews with the president of **UBT**, and the general director of **IT** and communications were conducted at the main campus of **UBT**, Dahban – Jeddah, while interviews with the former e-learning project coordinator were held in Sari campus – Jeddah.

The interview with the president started by general questions about university such as, year of established, programs offered ...etc. This was followed by specific questions about e-learning project in the university.

Also, he added that the problems facing us in this matter is not only a technical, but also human and legislative, but the e-learning is coming inevitably and became an urgent need for some colleges and disciplines.

The vision and mission as expressed by the president of the university was: *"Our vision is to become a leading institution in e-learning for **UBT** students as well as to those who did not have a chance to continue their college education. and "Our mission is to provide quality e-learning system for interactive teaching process in classes, off classes, and beyond university boarders".*

According to an interview with **UBT** e-learning project manager, said that "along with the new regulated approach of approving online courses by the Saudi ministry of higher

education, **UBT** has to adopt and apply E-learning to enhance the educational experience inside their campuses and outside as well". *"Our projet is promising due to the noevelty of the university, but we achieved a lot in few years. more recently we have established the virtual library to the teaching staff members, students and researchers".*

Different forms of e-learning has been implemented at Saudi universities but at **UBT** the aim of this program was to develop courses that are "made at **UBT**, (*See Table 1 and Table 2*). " from scratch, and offer these courses to students online: *"Our ambition at the **UBT** to become the Leader University of e-learning education in the region as well as develop an e-learning world where teachers, learners, trainees, and researchers use technology to enhance the overall educational experience both in campus and off campus", according to (E-learning project manager at **UBT**).*

The interview with the general director of **IT** & communications department in the university, it took a longer time as the role of this department at **UBT** is very important; it is the basis for development and conducting the work at all sections and departments of the university, the most important department in the university when talking about e-learning.

According to general director, this department provides comprehensive applications development services to all **UBT** departments and managing all **UBT** applications, provides comprehensive infrastructure services to **UBT** and maintains a high expanding WAN network connecting all its campuses (Dahban, Jeddah, and MBA) providing services to all administrative and academic departments. With regard to e-learning, he stated: *"at **UBT**, we have a good history of campus collaboration in developing technology plans. Prioritization and coordination of technology planning and implementation will ensure that **UBT** students, faculty, and staff have the combination of skills, knowledge, and technology to thrive in a technology".*

VII. DISCUSSION

In this piece of work we examines the nature of change in higher education with respect to the introduction and growth of E-learning. While the ostensible aim is to use E-learning to improve the quality of the learning experience for students, the advisors of change are numerous, and learning quality ranks poorly in relation to most of them. Those of us working to improve student learning, and seeking to exploit E-learning to do so, have to ride each new wave of technological innovations in an attempt to divert it from its more natural course of technohype, and drive it towards quality agenda. We have to build the means of e-learning to evolve and mature as part of the educational change processes, so that it achieves its promise of an improved system of higher education.

The original plan has been to offer online courses developed by **UBT** staff which lead to offering online degrees and ultimately achieve the vision of the 'virtual university'. Among Saudi universities, **UBT** is arguably the first university to follow such a methodology according to a market research.

This is what made the project more challenging. Therefore, for a number of reasons there have been many changes within the project as in the beginning in **CBA.**, and such changes had to be

managed so that the project could be continued to Moodle the current e – learning system in **UBT**.

In this section we will discuss a number of these changes that have been faced and consequently discuss these issues with the people related to this system in relation to a theoretical framework. **First**, Higher Education in Saudi Arabia is subject to laws and regulations of the Ministry of Higher Education (MoHE.) and according to these laws, offering online degrees are still not allowed. Therefore, the implementation of the original vision of “E-learning University “is still not possible. The non-accredited status of on – line courses over the internet in the Kingdom is the known major reason for not taking on – line courses, the other reason is the non – interaction with other students and faculty (**34**).

The second issue that proved to be problematic is the development of a fully online course from scratch as this proved to be difficult, time consuming, and lacks some aspects such as the required interactivity between students and instructors (**17**). These problems have resulted in making changes to the development methodology for the courses themselves, which has led to UBT to adopt a new methodology for developing its tools and courses using Moodle. The aims of this new methodology are to shorten development time, provide better interactivity, enhance collaborative learning, and meet the requirements of the MoHE in terms of blending online with face to face teaching is argued to be most successful approach for e – learning (**35**).

Technological uncertainty is the **third** issue. The technology for the project had to be changed because the original specifications for that IT infrastructure were seen to be insufficient. The new technology infrastructure was with better specifications and the change in technology proved to be positive change in the project. **Fourthly**, the availability and sustainability of human resources involved in the project have been a major challenge and resulted in many changes within the project team, which has also been reflected on the implementation of the project.

The project also faced a number of challenges that have also affected its implementation. One of the major challenges is the culture related to e – learning among faculty members and students. For some faculty members, it was difficult to change the way of teaching for many years, as e – learning is a new trend that requires new teaching cultures (**36**) and for some students changing the way they were taught was also difficult, which has also been the case for students elsewhere (**4**).

Higher education institutions face persistent challenges in the use of technology, with e – learning management systems being the latest technology challenge. Getting a new idea adopted, even when it has obvious advantages, is difficult. Accordingly, adapting new technological innovation, such as e – learning systems, in higher education requires faculty to change their ways of teaching; such change does not come easily (**37**).

The reviewed literature identified some challenges for implementing- learning systems tools in the institutions of higher education, which are due to a number of different issues, the most common challenge are; faculty members hesitate to change; some faculty members do not have skills to use e- learning systems, and are not especially eager to learn; and there is an institutions reluctance to provide sufficient personal and financial

assistance to facilitate the use of such technology. .One of the other challenges for implementing e – learning systems in higher education is that some instructors may have felt threatened by change, so chose to resist e – learning systems (**17**).

To overcome these issues, extensive training is needed but the problem is that training is costly, time consuming and of course sustaining the qualified faculty members is another problematic issue. Furthermore, appointing a qualified project manager who is able to translate the vision of the e – learning project into a workable plan has proven to be difficult. Changing managers in a short period of time meant that each project manager comes with different: vision; plan of action; management style; and this create confusion and uncertainty (**17**).

VIII. CONCLUSION, RECOMMENDATIONS AND FUTURE WORK

8.1.CONCLUSION: E-learning technologies become increasingly utilized in UBT issues related to standardizations for reusability and interoperability, assurance of quality, and prevention of adverse effects, become crucial. Therefore, national standards for E-learning should be developed. Moreover, many constraints related to Higher Education laws and regulations within each country need to be considered carefully because of the special nature of the educational process.

The issue of E-learning itself is still problematic in terms of its definition and consequently the methods of implementation. Before starting an E-learning program, any institution needs to have a clear vision of its aims and the risks and challenges involved. In addition, human resources, their culture and the ability to sustain these resources once they acquire the necessary know-how are major issues that need careful consideration. Empirical examining for this study will be the subsequence phase .

8.2.RECOMMENDATIONS: with reference to the findings and conclusions of the study, the following recommendations are offered:

In order to promote E – learning, the government should come up with regulation and accreditation plans so that companies / universities willing to offer E – learning courseware can start planning for such courses.

Increase the educational community awareness of the importance of the E – learning.

Encourage the private sector to help in this kind of education and provide financial support.

Further researches need to be undertaken concerning the pedagogical methods that are employed in using E – learning tools.

Solve complex E- learning issues with Higher Education, government and corporate partners.

FUTURE RESEARCHES: In order to support the rapid exchanges in information and build on the experiences of different national and global academic institutions, further researches is needed to understand what is being developed, implemented in terms of e – learning activities, capacities, and

infrastructure. Finally, it could be argued that generalization in our case may be in drawing implications and contributions of insights that are useful for the e - learning project at UBT in the future.

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REFERENCES

[1] P. A. Bliuc Goodyear and R. Ellis.(2007). "Research focus and methodology choices in studies into students' experiences of blended learning in higher education", *Journal of Internet and Higher Education*, vol. 10, pp. 231-244.

[2] .Dublin, L. (2003). If you only look under the street lamps..... Or nine e-Learning Myths. The e-Learning developers journal. Retrieved July 2005 from <http://www.eLearningguild.com>.

[3] European Commission (2001).The eLearning Action Plan: Designing tomorrow's education. Retrieved on July 2006 from <http://www.elearningeuropa.info>.

[4] J. O'Donoghue, G. Singh and D. Handy.(2003). "Higher education – IT as a catalyst for change", *On the Horizon*, vol. 11, no. 3, pp. 23-28.

[5] W. J. Orlikowski and J. J. Baroudi.(1995). "Studying Information Technology in Organizations: Research Approaches and Assumptions", *Information Systems Research*, vol. 2, pp. 1-28.

[6] G. Walsham.(1995). "Interpretive case studies in IS research: nature and method", *European Journal of Information Systems*, vol. 4, pp. 74-81.

[7] Redfern and Naughton. (2002). Collaborative virtual environments to support communication and community in Internet - based distance education. *Journal of Information Technology Education*,1 (3) , pp. 201 - 211.

[8] Sicilia, M. (2007).Competencies in Organizational e- Learning: Concepts and Tools.Information Science Publishing.

[9] Casal,C.(2007). ICT for education and development ,*Info*,9 (4) , pp. 3 - 9 .

[10] O'Reilly, T. (2005)."What Is the Web2.0 ? Design patterns and Business Models for the Next Generation of Software . s.l. : Web 2.0 Conference,O'Reilly Media.

[11] Pollock and Conford . (2000).Theory and practice of the virtual university.Ariadne,24. [Online] 2000. [Cited: November 5, 2003.] www.ariadne.ac.uk/issue24/virtual-universities/.

[12] H. Kelly, M. Ponton and A. Rovai.(2007). "A comparison of student evaluations of teaching between online and face-to-face courses", *Journal of Internet and Higher Education*, vol. 10, pp. 89-101.

[13] Al-Smadi & Al - Shboul.(2008).Challenges of Implementing Digital Certificates in Jordan and its impact on e - business.:paper presented at the 2008 International Arab Conference of e - Technology (IACe-T'2008),15 - 16.Amman - Jordan .

[14] Koubek and Jandle. (2000). Diversified use of ICT in education.Campus - Wide Information Systems 17 (5) , pp. 161 - 166.

[15] Twigg,C.(2005).Innoviations in online learning:Moving beyond no significance. <http://www.thencat.org/Monographs/Mono4.pdf> . [Online] 2001. [Cited: October 25, 2005.]

[16] Morgan, G.(2003). faculty use of course management systems (Volume 2).Boulder , colorado : Educause Center for Applied research. [Online] 2003. Available online: <http://www.educause.edu/LibraryDetailPage/666?ID=ERS0302>.

[17] Hussein Al-Yaseen,Mou'ath Hourani,Saheer Al-Jaghoub.(2012). Success and Failure of e-Learning Projects: Alignment of Vision and Reality,

Change and Culture. *Journal of Emerging Trends in Computing and Information Sciences*VOL. 3, NO. 2, PP.1- 8.

[18] Meredith and Mantel.(2006). *Project Management :A managerial Approach*. Asia : wiley.

[19] W. Duncan "Developing a Project Management Body of Knowledge Document", *International Journal of Project Management*, vol. 13, no. 91,1995.

[20] C. Gray and E. Larson "Project Management: The Managerial Process", McGraw-Hill, New York, 2008.

[21] Beekman, M., Chenhall, R. H., & Euske, K. J. (2007). Management control systems as a tool for planned organizational change.*Cost Management*,21,15 - 25 .

[22] Al-Mudimigh, A., Zairi, M., & Al-Mashari, M. (2001). ERP software implementation: An integrative framework. *European Journal of Information Systems*, 10, 216-226.

[23] Harris, J. (1999). Designing change management strategies for ERP systems: Observations from Alameda County, California. *Government Finance Review*, 15(4), 29-31.

[24] Hornstein, H. A. (2008). Using a change management approach to implement IT programs. *Ivey BusinessJournal Online*, 72(1). Retrieved from <http://iveybusinessjournal.com/publication/using-a-changemanagement-approach-to-implement-it-programs/>.

[25] Hornstein, H. A. (2014). The integration of project management and organizational change management is now a necessity. *International Journal of Project Management*. Retrieved from <http://dx.doi.org/10.1016/j.ijproman.2014.08.005>.

[26] Berlin. (2009).Comparison of estimation methods of cost and duration in IT projects.*Information and Software Technology*,51(4) , pp. 738 - 748.

[27] H. Linderoth and G. Pellegrino.(2005). "Frames and inscriptions: tracing a way to understand ITdependent change projects", *International Journal of Project Management*, vol. 23, no. 5, pp. 415-420.

[28] Garies and Humann.(2008).Change management and projects.*International Journal of project Management*,26 (8) , pp. 771 - 772.

[29] W. Steffens, M. Martinsuo and K. Arto, K.(2007). "Change decisions in product development projects", *International Journal of Project Management*, vol. 25, no. 7, pp. 702-713.

[30] R. Atkinson, L. Crawford and S. Ward.(2006). "Fundamental uncertainties in projects and the scope of project management", *International Journal of Project Management*, vol. 24, no. 8, pp. 687-698.

[31] Mulla,Mohammad.(2007).National Communications and IT plans.Riyadh : The Ministry of Communications & Information Technology .

[32] D. Tavangarian, M. Leypold, K. N_olting, M. R_oser and D. Voigt.(2004). "Is e-Learning the Solution for Individual Learning", *Electronic Journal of e- Learning*, vol. 2, no. 2, pp. 273-280.

[33] R. Yin.(1993). "Case study research: design and methods", 3rd edition, Thousand Oaks, London: Sage.

[34] Sayed.M.(2003).perceptions about e - Learning in Saudi Arabia. Al - dammam : king Fahd University of petroleum & Minerals, Saudi Arabia.

[35] D. Georgina and M. Olson.(2007). "Integration of technology in higher education: A review of faculty self-perceptions", *Journal of Internet and Higher Education*, vol. 11, pp. 1-8.

[36] J. Uhomoihi.(2006). "Implementing e-learning in Northern Ireland: prospects and challenges", *Campus-Wide Information Systems*, vol. 23, no. 1, pp. 4-14.

[37] Rogers, E. M.(2003). Diffusion of innovations (5th.ed.). NewYork : Free Press.

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Table (1): E – learning current services at U.B.T.

Smart Classroom software	UBT campuses install smart software in each classroom and in each instructor computer. The smart software includes smart notebook and smart board software and such. It allows the teacher to customize and designs his/her own lectures to be interactive and animated and present it inside the classroom using the smart touch boards. It transforms a rigid text lecture into a creative, innovative interactive experience inside the classroom. The students enjoy smart board lectures and they get to experience the board when presenting their projects themselves or solve exercises on the board.
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Source: www.ubt.edu.sa/.../Applications-Development-Division/E-learning

Table (2): E – learning Projects

Phase (1): Interactive learning & communication and ease Of online process projects:
Video Conferencing
E – Mail Services: For staff e-mail Use your UBT e-mail account from any Web browser, Schedule meetings and appointments on your calendar, Save phone and address information for people you communicate with. Student Email services, Shared calendars, File sharing, One Drive cloud storage, Online conferencing, Screen sharing, Public website, Office Online: Create and edit Word, Excel, PowerPoint, and OneNote files via a web browser
LMS: learning management system (Moodle) enhancements; Moodle is a free and open source e-learning software platform, also known as a Course Management System, Learning Management System, or Virtual Learning Environment. E-learning system, Course materials , Presentations, Handouts, Projects , Quizzes, Assignments, Messages, Chat , Discussion Forums.
Interactive course contents
E- library (library department)
Online payment /Admission/Registration
Mobile connectivity
Phase (2) : Extended learning resources to distance students and facilitate distance learning projects :
Online admission
Virtual classroom
Website student E – learning
Online and contents
Exam proctoring

Source: www.ubt.edu.sa/.../Applications-Development-Division/E-learning.