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Literature Review

Identification and prioritization of critical issues for the promotion of e-learning in Pakistan



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ABSTRACT

Integration of information and communication technology in education is emerging as the new paradigm of learning and training. Higher education institutions are struggling to shift to this new paradigm to facilitate more and more learners with the flexibility of any time-anywhere learning. E-learning is not gaining as much popularity in the developing countries as it was expected in the last decade. Little work has been done in this area of research in the developing countries. This study contributes to identify and analyze the impact of critical issues which are creating barriers in the promotion of e-learning in the developing countries like Pakistan. Furthermore, this study contributes in devising taxonomy and proposing new category software for the identified critical issues. A mix mode research model has been applied to collect data from the e-learning experts of different public sector universities of Pakistan to get a deeper understanding of the issues and their impact on the promotion of e-learning in Pakistan. The findings of this study reveal sixteen (16) critical issues which are classified in five (5) dimensions, to be addressed on priority basis to promote e-learning in Pakistan. The identified dimensions and issues have been prioritized according to their importance using the Analytical Hierarchy Process method.

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1. Introduction

The integration of Information and Communication Technology (ICT) in the field of education can be easily recognized in the existing literature (Abdellatief, Sultan, Jabar, & Abdullah, 2011; Bhuasiri, Xaymoungkhoun, Zo, Rho, & Ciganek, 2012; Collis & Moonen, 2012; Gerbic, 2004; Sajja, 2008). It reshapes the traditional distance education into the new electronic mode of education. Numerous synonyms can be found in literature for this new paradigm, e.g. internet based learning (French, 1999; Gerbic, 2004), borderless learning (Latchem, 2005), flexible learning, online learning, technology based learning, web-based learning, electronic learning or sometimes also called e-learning (Forman, Nyatanga, & Rich, 2002; Khan, 2003; Puri, 2012; Sajja, 2008; Selim, 2007). We will use the synonym "e-learning" to refer to the ICT based education for this study. E-learning is a rapidly progressing method of education and training round the globe due to its ease of accessibility, learning, training and cost effectiveness. This mode of learning can also be used to improve the quality of teaching and learning (Bhuasiri et al., 2012). E-learning market has a growth rate of 35.6% worldwide (Sun, Tsai, Finger, Chen, & Yeh, 2008). Due to this reason universities all over the world are switching to this borderless learning to reduce the cost of education and to enhance their revenue.

It is still difficult to find a single complete and comprehensive definition of e-learning from the existing literature. E-learning is considered the learning using electronic devices which deliver the contents to the learners. The devices include internet, audio, video, TV, CDROM, satellite and so on (Abdellatief et al., 2011; Ozkan & Koseler, 2009). Another definition of e-learning is the learning and communication activities using computers and network (Roffe, 2002; Schank, 2002; Wong, 2007). Furthermore e-learning can also be defined as a learning platform based on internet, which is facilitating both the learners and the instructors to cooperate with each other to enhance learning (Lau, Yen, Li, & Wah, 2013). In addition, e-learning is further explained as self-directed learning based on web technologies. He emphasized that e-learning is actually collaborative learning (Bleimann, 2004). It is also urged by Sun et al. (2008) that e-learning is the use of telecommunication technology to deliver information for education and training. In brief, it can be concluded from the above definitions that e-learning is based on ICT (Arif et al., 2014).

In Pakistan, higher education facilities are progressively expanding for uplifting the socio-economic condition of the people. The Higher Education Commission (HEC) of Pakistan supervises all the universities and degree awarding institutions in the country to evaluate, improve and promote higher education and research in the country. HEC categorized higher education institutions (HEIs) into three groups; (1) public sector universities, (2) private sector universities, and (3) degree awarding institutes focused in some specialized disciplines. At present, there are total of 139 universities/degree awarding institutions in the country (Finance, 2014). However, the demand of higher education is running ahead of

available resources at formal universities and degree awarding institutions (Khattak, 2010).

The education system of Pakistan faces numerous problems at all level especially at the higher education level. These problems include acute shortage of qualified faculty, low student motivation, outdated curriculum, inequality of opportunities between urban and rural areas, across gender and amongst provinces of the country (Aziz et al., 2014). Moreover, education sector has always been given lower priority in terms of government and social expenditures. Public expenditure on education is less than 2% of the GDP (Rahman, 2014). The adult literacy rate is 76% in urban and 51% in rural areas with the population of estimated 170 million (Finance, 2014). This situation of lower literacy rate in the rural areas of the country is due to the lack of educational facilities, quality teachers and unawareness of the importance of education for the economic betterment of the people. Furthermore, access to higher education is one of the most acute and continual challenge to build up the human capital and transforming into knowledge based economy. The likelihood of investment in the development of infrastructures to support HEIs to shift from traditional education system to new paradigm of e-learning seems to be challenging due to little spending of the government in the education sector (Qureshi, Ilyas, Yasmin, & Whitty, 2012). It is the need of the hour to integrate ICT in the higher education system and a paradigm shift is required from the conventional educational system to the new computer mediated education model for the promotion of higher education in Pakistan. This gap is being filled by distance education or e-learning to educate the masses nation-wide.

E-learning is still in its early stages of adoption and implementation in the developing countries. They are facing different challenges in the implementation which are quite different from the developed countries (Bhuasiri et al., 2012; Nawaz, 2012). Many developing countries including Pakistan are eager to implement the e-learning paradigm (Grönlund & Islam, 2010) but are experiencing different issues such as resources, infrastructure, internet access, support from institution, personal characteristics as well as culture and policy in the promotion of e-learning paradigm (Bhuasiri et al., 2012; Nawaz, 2012). Economic and law and order situations are at the downward trend in Pakistan. In this current scenario, e-learning is the best possible solution to educate and train the people. E-learning is not gaining as much attention in Pakistan as it was expected (Khan, 2007). We have found that little work has been done in this area of research in Pakistan. Some studies have been conducted for Pakistan such as (Farid, Ahmad, Niaz, Itmazi, & Asghar, 2014; Iqbal & Ahmed, 2010; Kundi, Nawaz, & Khan, 2010; Nawaz, 2012; Qureshi et al., 2012; Qureshi, Nawaz, & Khan, 2011), but these studies have identified only some of the e-learning challenges, issues or predictors but no classification of the issues have been performed. Moreover, according to our knowledge, no such study have been conducted which have not only identified but also classified and prioritized the issues for the promotion of e-learning in Pakistan.

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