E-Learning Perception and its Relationship with Demographic Variables: A Factor Analysis Approach

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ABSTRACT

The last decade is witness to a number of education centers offering e-learning courses. This paper explores students’ perceptions about e-learning as a potential medium for delivering business education. The sample comprises of students studying full-time business management course at IIM-A, a premiere management institute in India. An online survey comprising of close-ended questions was administered to a set of 240 students. In response, 154 complete and usable submissions were received. An analysis was carried out on to identify the e-learning awareness and degree of familiarity of the students with the various e-learning technologies and factor analysis was carried out on statements on perception to extract the underlying factors of perceptions. Subsequently, a chi-square analysis was carried out to determine the relationship between perception and various demographic variables like gender, age group, education, educational background and work experience. Further, a one way ANOVA is performed to examine whether the mean factor scores vary across demographic variables.

Keywords: Awareness, Business Education, Demographics, E-Learning, Perception

INTRODUCTION

The last few years have witnessed a growing interest in the concept of e-learning, with many experts believing that there is a shift happening from traditional face-to-face instructor led learning to an era of technology driven, collaborative, student-centric learning. In India, the percentage of students that are returning to education after work is increasing. The evolution of e-learning platforms offers the students a flexibility to integrate education with demands of work and family. E-learning is also beginning to penetrate K-12 education, adult learning and corporate training. The number of institutions offering online diploma and certificate courses in India is increasing as professionals are realizing the importance of lifelong learning in their quest for long-time survival.

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There is an increase in the number of companies venturing into e-learning business. The global market for e-learning reached US $90 billion in 2002 (Yong, 2003). Even the younger generation in the age of 16 – 18 years is today more inclined towards e-learning because of the increasing trend towards the Internet and computer technology (Lau, 2002). Therefore, both academic units and enterprises are gradually moving from the traditional classroom bound learning to anytime, anywhere e-learning to meet the demands for a learner-centered learning environment.

E-Learning is multifaceted, covering a wide range of approaches and methods (Clarke, 2007). There are a number of technologies utilized for online learning. According to Hiltz and Turoff (2005), it includes correspondence courses, physical email, printed matter, audio recordings, computer assisted instructions, synchronous and asynchronous communication, Web and multimedia material, simulation and gaming, collaborative learning, asynchronous learning networks (AL), collaborative knowledge systems and wireless and handheld devices. The communication media may also include learning objects, video-on-demand, virtual laboratories, virtual classrooms, net meetings, streaming media, simulation, online assessment and web based management tools (Roffe, 2002).

E-learning is centered around Information and Communication Technology (ICT). The technology is indeed needed in e-learning to educate the learner through the use of two-way video, two way computer interaction, cable, satellite downlinks and the Internet (Evans & Hasse, 2001). According to Honey (2001), learning from e-mail, on line research, on line discussion are the examples of learning activities that involve ICT. According to Hiltz (1997), the necessary hardware for e-learning such as desktop or note book computer and printers are needed. Small and medium enterprises are not willing to adopt e-learning to educate its employees mainly due to the lack of hardware support.

## REVIEW OF LITERATURE

### Evolution of E-Learning

E-learning, e-education or online learning refers to the way people communicate and learn electronically (Roffe, 2002). With improvements in information technology infrastructure, for instance, bandwidth, interactivity, multimedia delivery, interfaces, security etc. e-learning is poised to emerge as a new wave in the technology driven education and training.

The evolution of e-learning dates back to late 80’s and early 90’s when computing technology was expensive and not commonly available. This gradual movement from instructor-led teaching to computer aided teaching was considered as a significant development as it meant making education and training more portable and engaging. Courses were delivered via compact disks which provided time and cost savings. In early 1990’s, some companies also started using Compact Disk based training for their employees. Despite the benefits, since the medium could not provide for interactivity and class discussion as in the case with instructor-led teaching, it lacked scalability. Further, it lacked the ability to track performance and was not easy to upgrade.

The emergence of the World Wide Web, email, browsers and multimedia support changed the way education was being imparted. The ability to deliver text and image context over Internet anywhere, anytime resulted in a large number of players offering Web based education solutions. Although this medium was perceived as vibrant, the effectiveness of the medium was still unknown.

Post year 2000, the next generation web emerged, powered by robust networks and high speed bandwidth capable of delivering rich streaming media. Today, as an outcome of this evolution, it’s possible to deliver any type of content at far superior speeds over the Internet. In addition, centralization of storage has made it possible to keep the content up-to-date with real-time monitoring and evaluation. Proliferation of mobile technology, cell phones,
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