Impact of Robust Technology Training through E-Learning in Corporate Hotels in India

Renju Mathai

Research Scholar, Department of Management Science

Manonmaniam Sundaranar University

Tirunelveli 627 012, India

E-mail: rkmathai@gmail.com

Abstract

Training is one of the key aspects of the hotel industry. There is a demand and shortage of qualified and well trained employees that need to be filled the gap in the Indian hotel industry. The main reason for the shortage of the skilled labors are the attitude of people about the job's dignity, working hours, pay package, personal growth, working environment and work life balance. This work force shortage will reflect on the availability of training time. The fast changing trends in the hospitality industry requires development of new skills and techniques, critical information in employee to meet the new demands and cannot be acquired by just relying on experience. This conceptual paper is an ongoing doctoral research paper that has identified few areas. The overall motive of this paper is to identify the impact of e- learning in the corporate training process in the hospitality Industry. With in this context, there are certain variables that can be achieved by overseeing the perception of hotel management towards e-learning as a training tool in the four and five star hotels, by investigating the advantages & disadvantages of e- learning, as a training tool in the corporate groups hotels, and finally looking into several factors that influence the management to select e-learning as a training tool.

Keywords: Training, E- Learning; Advantages & disadvantages of e- learning, Promoting e-learning, Factors influence e- learning, E- learning system and benefits of e- learning

1. Introduction

Indian hotel industry is pooled with several international hotel chain as well as Indian-owned hotel chains. All the business functions are done to ensure, how it plays an important role in the company's success. Knowledgeable employees are an asset for an organization as they can provide real value to customers. Historically, training was considered as an adjunct function of a department but now it has been elevated to an essential department to meet the competitive business needs. It is a business requirement to be in the success row of the competitive industry. The main reason for the shortage of the skilled labors are the attitude of people about the job's dignity, working hours, pay package, personal growth, working environment and work life balance. This work force shortage will reflect on the availability of training time. The fast changing trends in the hospitality industry requires development of new skills and techniques, critical information in employee to meet the new demands and cannot be acquired by just relying on experience. Strategic training and development initiatives are learning-related actions that a company should take to help it achieve its business strategy. Diversification of learning portfolio, expanding the people to be trained, accelerate the pace of employee learning, improve customer service, provide development, opportunities and communicate to the employees, Capture and share knowledge, Align training and development with the company's strategic direction and ensure that the work environment supports learning and transfer of training. To be successful in globalization, diverse cultural backgrounds training is an important criterion.

1.1 Training

Training is said to be one of the important aspect in the changing technology and market (James Malitoni and Jarvis Baluti 2014) .The hospitality industry is undergoing a period of extraordinary transformation with unparalleled opportunity (Ferguson, 2008) which has left in the involvement of more complex work forces which emphasis the importance of training. The changing business environment, 24 x 7 work schedule, expectations of the guest makes the scheduling of training to be difficult. Employees of the hospitality industry deal directly face to face with the customers who can give immediate response a compliment or complaint. As per the research conducted by James Malitoni & Jarvis Baluti (2014), ninety three percent highlighted that the training programs improved their skill, knowledge and behavior. According to Monika (2013) studies has shown that to ensure good workforce is to provide appropriate education and training , that the present time need the people learning new knowledge and skills in an efficient and effective manner. Human learning can occur as part of training, personal development by all means to get the sufficient knowledge and skills to perform the job. (Geetha K. Joshi, Venkata Subrahmanyam & Sandhya Anvekar 2014). The huge incorporation of knowledge in any business activity has gone with wide spread increase in the great need for continuous professional training (Josep-Maria Batalla-Busquets*, María-Jesús Martínez-Argüelles 2014)

1.2 E- Learning

E-learning is a component of learning, training and development in organizations by the continuous spread of ICT. It gives us a wide choice for delivery of the training content and

when & where it can take place. "E-learning or technology enhanced learning describes the use of technology to support and enhance learning practice" (Mayes & De Freitas, 2006 in Vargas & Tian, 2013). There are lots of definitions of e- learning that is evolving as an instructional learning experience which is delivered and enabled by the internet technology in turn enhances the employee's knowledge and performance. (Monika 2013). The future of learning environment based on e- learning that focus on both the individual requirements of learners and the content delivered. (Clark & Mayer, 2008 in Al-Furaydi, 2013). E- learning can really reduce the time learner spend on learning which allows them to access a great spectrum of different materials with their own individual competences without the time limitations (Faten Karim & Robert Goodwin 2013) To connect the worlds institutions and hotels E-learning is one of the best tools that can be considered as best and easy way to grab the knowledge. (Parikshat Singh Manhas & Parvinder Kour 2014). As per the study of Yousef Mehdipour & Hamideh Zerehkafi (2013) e- learning is a real- time or self paced which is known as "synchronous" or "asynchronous" learning that is presented in formal and structured manner. As per Kumar (2013) states that e- learning is the use of knowledge that is distributed and facilitated by electronic means of web based, multimedia CD- ROMs, websites, discussion boards, collaborative software , emails, blogs, wikis, test chat, simulation games and educational animation. It is to define any dissemination of educational knowledge over the internet which is the subset of technology – based training. As per Kaushalya yatigammana, Md Gapar Md Johar & Chandra Gunavardhana (2014) identified that adapting to an e-learning to a system is always a best approach for its users. In any ways e leaning can be taken as an innovative method of learning. Wagh (2014) has mentioned in his research, through e- learning, it is clearly understood that it provides any time access and any space teaching facility with an efficient way of transferring the knowledge and training. These methods of giving a complete access and autonomy to the learners are able to get the full insight of the learning and training environment.

1.3. Advantages of e- learning

E-Learning helps us to track and understand at a very rapid rate where our gaps may exit. E-learning allows us to deliver training material efficiently and quickly into the hands of hourly employees with a consistency we've never been able to have before. The technology allows us to track and see whether the material is in the hands of the staff and the on-line testing gives us immediate result. It is noted that e- learning has created a greater flexibility and control that typically afford learners to access (Kenneth G. Brown & Steven D. Charlier 2013).   According to Monika (2013), e-learning in the corporate training world is increasing rapidly due to the time and budget efficiency in course development and delivery. Many authors like Tanya J. McGill ,Jane E. Klobas & Stefano Renzi (2014) has quoted that given the issues relating to financial support, the lowest ranked condition related to the initiative being financially advantageous for the e- learning. The studies from Geetha K. Joshi, Venkata Subrahmanyam & Sandhya Anvekar (2014) says   that e-learning will control costs, increasing quality, better suited for geographically diverse employees, provide more consistent course delivery, and render more individual instruction & attention to the employees by modernizing the work force. Accessibility of training to a broad audience, sophisticated tracking features that can record individual training performance for training

administration, self directed learning, instructional elements including practice, immediate applicability, quicker & consistent access to the employees and feedback that can be easily accomplished without interaction with a live instructor are some of the great features of e-learning.

1.4. Disadvantages of e- learning

Some of the basic disadvantages faced by the learners are that they have to be technologically dependent on machine of minimum specification and the content incompatibility, as they are designed to function on specific operating systems (e.g. Apple Macintosh and the windows PC). Some of the materials will be unsuitable for certain types of learners, where it require high- level of self discipline, enough of personal time and reliable quality of content. Inflexibility may be lost as adjustments to the course.(Geetha K. Joshi, Venkata Subrahmanyam and Sandhya Anvekar 2014). Researchers like Ekta Srivastava & Nisha Agarwal (2013) have also indicated that there might be unmotivated learners with poor study habits who fall behind, instructors may not be available on time of demand and slow, unreliable internet connections. Finally it is noted that the asynchronous communication can hinder fast exchange of questions. Lack of proper infrastructure, lack of curriculum, lack of maintenance and technical support, lack of confidence in comparison with face to face, prior educational experience (Alawneh 2014), change process in the education program (Faten Karim & Robert Goodwin 2013), lack of management buy in, Lack of proof concerning and return on investment Raymond Noe (2008) are some of the drawbacks of the e- learning process.

2. Factors that influence e- learning

2.1. Economic factors

Corporate managers are constantly looking for more cost-effective way to deliver training to their employees. One of the aspects that were discussed by Solomon A. Odunaike, Oludayo O. Olugbara, & Sunday O. Ojo (2013) is that e- learning is associated with many innovations and great pool of knowledge that gives the employees with lots of experience at their convenient time. E- Learning gives a flexible methodology which makes it easier to mix both work and training together. (Josep-Maria Batalla-Busquets[*], María-Jesús & Martínez-Argüelles 2014). According to Ekta Srivastava & Nisha Agarwal (2013), e- learning is cheaper and efficient where thousands of trainers can participate at a time.
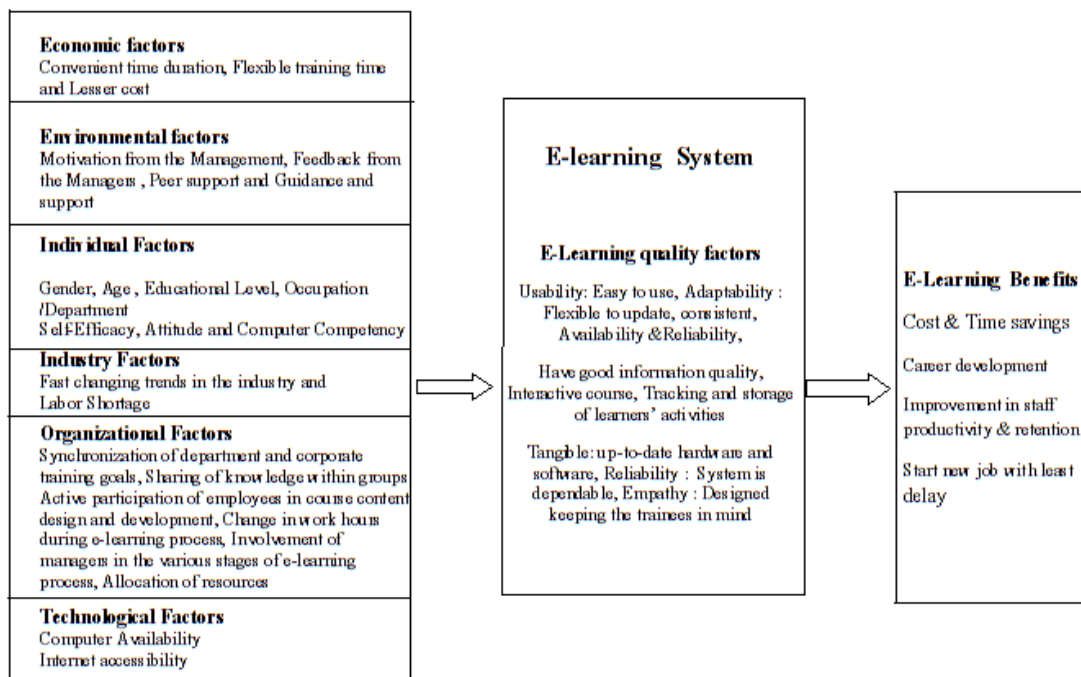
Economic factors
Convenient time duration, Flexible training time and Lesser cost

Environmental factors
Motivation from the Management, Feedback from the Managers , Peer support and Guidance and support

Individual Factors
Gender, Age , Educational Level, Occupation /Department
Self Efficacy, Attitude and Computer Competency

Industry Factors
Fast changing trends in the industry and Labor Shortage

Organizational Factors
Synchronization of department and corporate training goals, Sharing of knowledge within groups Active participation of employees in course content design and development, Change in work hours during e-learning process, Involvement of managers in the various stages of e-learning process, Allocation of resources

Technological Factors
Computer Availability
Internet accessibility

E-learning System

E-Learning quality factors
Usability: Easy to use, Adaptability : Flexible to update, consistent, Availability &Reliability,

Have good information quality, Interactive course, Tracking and storage of learners' activities

Tangible: up-to-date hardware and software, Reliability : System is dependable, Empathy : Designed keeping the trainees in mind

E-Learning Benefits

Cost & Time savings

Career development

Improvement in staff productivity & retention

Start new job with least delay

Figure 1. Conceptual Frame Framework of E- Learning system

2.2. Environmental factors

Researchers Liu, Cesar C. Navarrete &Wivagg (2014)   has indicated that to accommodate the needs and encourage student directed learning, mentors can consider management plans to monitor employee learning and create activities to use wide range of apps/ features to motivate them to learn (e.g., audio recordings, video productions, digital stories available on mobile devices). Hwang et al (2014) suggested that motivation to learn and interest is the most significant aspects that help to personalized guidance and constant feedback provided in learning system. As per Yueh et al (2014) the studies indicated that constant management support and feedback on material, course analysis, course production presentation and interaction are the part of e- learning system.

2.3. Individual factors

According to Rakesh (2014), individual factors like characteristics of age, gender, teacher-led or self-study, familiarity with computer, and learning style are completely influenced by the a diversity of variables like demographics, accessibility to computers, digital literacy which is knowing of computer knowledge , and ease of use of new system. According to Social cognitive theory and technology acceptance theory, motivation to learn and self efficacy are the individual characteristics which influence the e-learning system. (Rabeb Mbarek, 2011)

2.4. Industry factors

According to MeghaTuli**,** &ManavThadani (2011) the availability of skilled and trained work

force is a crucial element in the successful long-term development and sustainability of a tourist destination. There is dire need for better trained and qualified graduates to enter the industry in order to meet the manpower requirement by 2021.

2.5. Organizational factors

Hwang et al (2014) have addressed that knowledge of sharing is one of its key indicators that that helps in the learning environment and instills in providing personalized learning support during the field activities. Lu et al (2014), expressed that through knowledge sharing system, the employees can upload repertory grids to the system, browse other materials and receive feedback from the mentors to discuss with their own peers. Management supports learners rendering an intelligent and multimodal synchronous question and answer session of knowledge sharing platform. Learners should take the ownership of learning activities through interaction and active participation which is very much important (Agbatogun, 2014) The instructors should create opportunity with the employees to interact with peers for designing of the course whereby it should be motivating and interesting. (Bolliger, D. U., Inan, F. A., &Wasilik, O. 2014) Vogel et al (2014) indicated that allocation of resources, such as diverse technological resources is one of the key issues that support educational activities. In the e-learning context, the involvement of top managers is allocation of resources and ensuring that the e-learning system is exploited in a planned and strategic manner in all the departments. (Ying Chieh Liu, Yu-An Huang & Chad Lin, 2012). According to Greg G. Wang, Diane Foucar-Szocki & Oris Griffin (2012), the variables that were considered regarding the organization support for e-learning process were provisions of incentive for completion, and changes in work hours during the e-learning process. Top management support which is an important factor, is defined as the top-level leaders' involvement and participation.

2.6. Technological factors

Technological factors are the interface that connects the trainees to the course content in an electronic networked environment. Researchers like Ekta Srivastava & Nisha Agarwal (2013) indicated that the employees can get computer and 24x7 internet access anywhere any time. Exploring the information and materials that are related to their specific course and training will provide a basis for their active participation in collaborative life-long teaching/ learning processes, which can enable them to reap the real benefits of an E-learning course. Computer can allow access (Kotsilieris & Dimopoulou 2013) to set of virtual worlds and not a single one but gives an easy access on its database and its source code.

3. E-learning Systems and quality factors

Saba (2012) opined that the management must upgrade the quality of the e- learning systems by faster and speedy response with better systems accessibility, higher system reliability and flexibility, and ease of learning. Studies based on the e- learning system quality has bought out some interesting facts mentioning (Sofia Balula Dias & José Alves Diniz, 2014) that in order to prevent specific technological emotional weakness, it seems that constant evaluation of the dynamic usability of the LMS, i.e., effectiveness, learn ability, flexibility and the users'

attitude is done. Adaptability means ability to be flexible and adjust to changing situations. Usability is a quality attribute that assesses how easy user interfaces are to use. The word "usability" also refers to methods for improving ease-of-use during the design process. As far as tracking and storage of learners' activities is concerned, A. Fernández et al. (2014) described that all services and people who are involved in the e- learning process can be visualized and managed through the web browser by showing real- time data and visual infrastructure that includes performance, configuration, storage, alarms & access permissions. It also offer more material to wider people and e- learners in a bigger context that has the ability to explore and reach more learners beyond traditional classroom. Vogel, B. et al (2014) indicated in his studies that integration of proper tools both hardware and software are reliable & up to date, services for supporting learning activities by testing the feasibility of technology & implementation, prototyping approach, welcoming the discussion of ideas of trainers and e- learners, design process, possibilities with users/learners the development becomes more easily manageable. As far as quality, evaluating of the e learning is one of the key indicators. Yueh et. al (2014) pointed that evaluating product quality could also be used as a framework for the design and development of e-learning materials or courseware which was developed by Taiwan E-Learning Quality Certification Center, in 2007. E- Learning developers and users are aware of the measuring the real quality and promoting. American Society of Training and Development (ASTD) has established an e-Learning Courseware Certification (ECC) to measure and check the quality of the quality assurance of the services provided by the company and the courseware certifications. Based on the studies of Peydaei et al (2014) , measuring the effectiveness of e- learning within the organizations can be done by using the tool of four levels of Kirkpatrick's evaluation model by understanding reaction, what they thought and felt about the training, by learning the result increase in knowledge or capability, extent of behavior and capability improvement by implementation/application and finally identify the results that effects on the business or environment resulting from the trainee's performance and self learning.

4. E-learning Benefits

According to the studies of Surjono (2014), e- learning is a hypermedia- based instructional program which benefits both class room and platform independence. Researchers like Mtebe, & Raisamo (2014) emphasizes that through e- learning, the organization can reduce major costs of hardware purchase, software licensing, electric power, cooling and salaries for IT support staff. Ayoo & Lubega (2014) identified that the need for sharing resources, including sensitization and awareness by creating workshops, public lectures, seminars and conferences will be seen by bringing change management, change attitude and bring all staff on board for e-learning resources sharing. Companies should constantly train their existing staff with the latest technologies by providing them with functional skills for the effective use of technology in their day today operational activities. As per Pi-Tzong Jan, Hsi-Peng Lu & Tzu-Chuan Chou (2012) articulated that in the new trend of the knowledge economy, employees need to enhance knowledge and skills which will continuously increase and give a best career. By this, there is improvement in the staff productivity and the efficiency of the employees and also career development. Some of the researchers like Geetha K. Joshi,

Venkata Subrahmanyam & Sandhya Anvekar (2014) noted that connectivity or networking, flexibility, interactivity and collaboration and virtual learning environment are some of the key elements that benefit the e- learning users to start their job very easily. Finally as per Nurhizam Safie & Syed Aljunid (2013), the key benefits of e- learning is reduction of costs which is linked with employees travelling to different places to train , reduced learning times, easy access to learning resources, flexible learning patterns, facilitating the exchange of experiences among employee workforce.

5. Conclusion.

Indian hotel industry is a boom with international and Indian owned hotel with domestic and foreign tourists in the county. Knowledgeable and skilled employees are proved to be an asset in hospitality industry. In order to enhance their competitiveness and skills, training and development of employees are essential. E-learning can be used by the management for rapid delivery of information, more reliable and better learning opportunities for employees. E-learning has several advantages such as online testing of employees, user friendly design process, flexibility, self learning, and self practice and also software's can be updated.   But there are several disadvantages of e-learning also such time and effort required to develop the programs also lack of proof concerning return on investment and lack of high quality content.

E-learning can be promoted by peer support in the organization for learning, mouth recommendations for any particular learning opportunities. Training managers and directors should maximize the level of support and involvement in the e- learning process in the organization. There are several factors that can influence e –learning in the company such as economic factors, environmental factors, individual factors, technological factors and industry factors. Considering theses factor various section of an organization can be dealt such as cost effectiveness, positive personal outcomes, gender based scenarios, changes can be reached out to the employees in well updates manner. E-learning system is generally defined by quality attributes. It's being analyzed that system quality can be defined by attributes such as adaptability, usability and reliability of the system and response time. E-learning is show to be a common business applications and processes , IT skills development   but these are not   so effective for mounting soft skills such as team building , communication or presentation which entirely rely on interpersonal contact. Evaluation of e-learning is a fundamental part of this system as it answers the question of how far the training objectives are met. In spite of the negative aspects of e-learning there are several benefits of this system. Interactive multimedia promotes motivation which eventually accelerates learning, enables knowledge transfer through retention. E-learning system excels to track learner activities and mastery of any material. It also has the potential to manage the growth in the amount of information that employees need in a hotel industry. Most of employees do not prefer to accept any drawbacks in them, thus e-learning system helps to overcome any such psychological problems in them, rapid growth of industries is in need of such technologies to overcome any scenario in the company.   Such software's help to increase employee performance and also helps employees to adapt changes according to the industry needs. Through constant use of e-learning system employees can easily transfer what they have acquired from the training to their job which eventually leads to enhance their

productivity. Thus it requires less time, cost saving and provide efficient and skilled employees.

Acknowledgement

References

Agbatogun, A. O. (2014). Developing Learners' Second Language Communicative Competence through Active Learning: Clickers or Communicative Approach? *Educational Technology & Society, 17*(2), 257–269.

Al-Furaydi, A. A. (2013). Measuring E-Learning Readiness among EFL Teachers in Intermediate Public Schools in Saudi Arabia. *English Language Teaching*, *6*(7), 110-121.

Al- Alawneh.M.K (2014) Examining E-learning barriers as perceived by faculty members of Engineering Colleges in the Jordanian Universities. *International Journal of Vocational and Technical Education. 5(4),* 42-53.

Batalla-Busquets J.M., & Martínez-Argüelles M.-J. (2014) Determining factors in online training in companies. *The International Journal of Management Education, 12*, 68–79. Elsevier Ltd. All rights reserved. http://dx.doi.org/10.1016/j.ijme.2014.01.002

Bolliger, D. U., Inan, F. A., & Wasilik, O. (2014). Development and Validation of the Online Instructor Satisfaction Measure (OISM). *Educational Technology & Society*, *17*(2), 183–195.

Brown, K.G., & Charlier.S.D (2013) An integrative model of e-learning use: Leveraging theory to understand and increase usage. *Human Resource Management Review, 23*, 37–49, http://dx.doi.org/10.1016/j.hrmr.2012.06.004

Chilembwe, J. M., & Baluti, J. (2014). Motivation and supervision in hospitality industry with focus to hotels and lodges in Mzuzu city. *International Journal of Social Sciences and Entrepreneurship, 1*(10), 1-13.

Clark, R. C., & Mayer, R. E. (2008). *E-learning and the science of instruction*. USA: John Willey & Sons.

Dias, S. B., & Diniz, J. A. (2014). Towards an Enhanced Learning Management System for Blended Learning in Higher Education Incorporating Distinct Learners' Profiles. *Educational Technology & Society*, *17*, 307–319.

Fernández, A., Peralta, D., Benítez, J.M., & Herrera, F. (2014). E-learning and educational data mining in cloud computing: an overview', *Int. J. Learning Technology*, *9*(1), 25–52. Copyright © 2014 Inderscience Enterprises Ltd.

Greg G. Wang, Diane Foucar-Szocki, & Oris. (2012). HRD Learning Participation: An

Empirical Study of E-learning Completion, ERIC – Education Resources Information Centre, James Madison University.

Hwang, G.-J., Hung, P.-H., Chen, N.-S, & Liu, G.-Z. (2014). Mind tool-Assisted In-Field Learning (MAIL): An Advanced Ubiquitous Learning Project in Taiwan. *Educational Technology & Society*, *17*(2), 4–16.

Joshi G. K., VenkataSubrahmanyam C. V., & Anvekar.S. (2014)**.**The Need and Importance of On-Demand E-Learning for Customized Management Skills Enhancement. *Journal of Research in Humanities and Social Science, 2*(2), 33-41.

Karim, F., & Goodwin, R (2013) Using Cloud Computing in E-learning Systems. *International Journal of Advanced Research in Computer Science & Technology (IJARCST)*, *1*(1).

Kotsilieris, T., & Dimopoulou, N. (2013). The Evolution of e-Learning in the Context of 3D Virtual Worlds. *The Electronic Journal of e-Learning*, *11*(2), 147-167.

Kumar. S. (2013). E- and M- Learning: A Comparative study. *International Journal on New Trends in education and Their Implications, 4*(3).

Liu, M., Navarrete, C. C., & Wivagg, J. (2014). Potentials of Mobile Technology for K-12 Education: An Investigation of iPod touch Use for English Language Learners in the United States. *Educational Technology & Society, 17*(2), 115–126.

Lu, C., Chang, M., Kinshuk, Huang, E., & Chen, C.-W. (2014). Context-Aware Mobile Role Playing Game for Learning – A Case of Canada and Taiwan. *Educational Technology & Society*, *17*(2), 101–114.

Mayes, T., & De Freitas, S. (2006). *Review of e-learning theories, frameworks and models.* JISC e-Learning Models Desk Study. Retrieved from: http://www.jisc.ac.uk/uploaded_documents/Stage%202%20Learning%20Models%20%28Version%201%29.pdf

Manhas, P.S., & Kour. P. (2014). E-Learning: An Emerging Trend to Strengthen Hospitality and Tourism Teaching-Learning Process. *Indian Journal of Applied Hospitality and Tourism Research, Special Issue: Travel, Tourism & Hospitality - Trends and Issues, 6.*

Mbarek .R (2011). Individual and Perceptual characteristics on E- Learning Outcomes, *Volume* **2011***, Article ID 399939, Communications of the IBIMA, 14 pages* http://dx.doi.org/10.5171/2011.399939

McGill T.J, Klobas.J.E., & Renzi.S. (2014). Critical success factors for the continuation of e-learning initiatives. *Internet and Higher Education, 22*, 24–36, http://dx.doi.org/10.1016/j.iheduc.2014.04.001

Mehdipour, Y., & Zerehkafi .H (2013) Mobile Learning for Education: Benefits and Challenges, *International Journal of Computational Engineering Research, 3*(6).

Monika, C (2013). Analysis of Perceptions of Conventional and E-Learning Education in Corporate Training. *Journal of Competitiveness,* *5*(4), 73-97, http://dx.doi.org/10.7441/joc.2013.04.05

Mtebe, Joel Samson, & Raisamo, Roope. (2014). eLearning Cost Analysis of On-Premise versus Cloud-hosted Implementation in Sub-Saharan Countries. *The African Journal of Information Systems*, *6*(2). http://dx.doi.org/10.1145/2405136.2405139

Mir Mehrdad Peydaei, Abbas Khodadai, & Shahriar Mahfoozi, (2014) **,**Proposing a Model to Evaluating the Effectiveness of E-Learning Programs Based on Adaptive Neural Fuzzy Inference System (Case Study: Tose'e Ta'avon Bank). *Applied mathematics in Engineering, Management and Technology, 2*(3), 366-377.

Nurhizam Safie, & Syed Aljunid. (2013). e- learning initiative capacity building for healthcare workforce of developing countries. *Journal of Computer Science, 9*(5), 583-591. http://dx.doi.org/10.3844/jcssp.2013.583.591

Philip O. Ayoo, & Jude T. Lubega. (2014). A Framework for e-Learning Resources Sharing (FeLRS),". *International Journal of Information and Education Technology, 4*(1), 112-119. http://dx.doi.org/10.7763/IJIET.2014.V4.380

Pi-Tzong Jan, Hsi-Peng Lu, & Tzu-Chuan Chou. (2012). The Adoption of E- Learning: An Institutional theory Perspective, TOJET. *The Turkish Online Journal of Educational Technology*, *11*(3).

Rakesh. H.M. (2014). Contextual Factors in using E-Learning Systems for Higher Education in India. *IOSR Journal of Business and Management (IOSR-JBM), 16*(2).

Raymond A. Noe. (2008). *Employee Training and Development: New York, USA*, The McGraw –Hill Companies Inc.

Saba.T. (2012). Implications of E-learning systems and self-efficiency on student's outcomes: a model approach. *Human-centric Computing and Information Sciences*, *2*(6). http://dx.doi.org/10.1186/2192-1962-3-11

Srivastava. E. & Agarwal. N. (2013). E-learning: New trend in Education and Training. *International Journal of Advanced Research, 1*(8), 797-810. S

olomon A. Odunaike, Oludayo O. Olugbara, & Sunday O. Ojo (2013). E-learning Implementation Critical Success Factors. *Proceedings of the International MultiConference of Engineers and Computer Scientists, I.*

Surjono.H.D. (2014). The Evaluation of a Moodle Based Adaptive e-Learning System. *International Journal of Information and Education Technology, 4*(1), 89-92. http://dx.doi.org/10.7763/IJIET.2014.V4.375

Vargas, N., & Tian, X. (2013). E-Learning: Much More than a Matter of Technology.*International Journal of e-Education, e-Business, e-Management and e-Learning*, *3*(3), 277. http://dx.doi.org/10.7763/IJEEEE.2013.V3.240

Vogel, B., Kurti, A., Milrad, M., Johansson, E., & Müller, M. (2014). Mobile Inquiry Learning in Sweden: Development Insights on Interoperability, Extensibility and Sustainability of the LETS GO Software System. *Educational Technology & Society*, *17* (2), 43–57.

Yatigammana.K, Johar.M., & Gunavardhana.C. (2014). Impact of Innovation Attributes and Psychological Wellbeing towards ELearning Acceptance of Postgraduate Students: Comparison of Sri Lanka and Malaysia. *The Online Journal of Distance Education and e-Learning, 2*(1).

Ying Chieh Liu, Yu-A Huang, & Chad Lin. (2012). *Organizational Factors' Effects on the Success of E-Learning Systems and Organizational Benefits: An Empirical Study in Taiwan. 13*(4).

Yueh, H.-P., Chen, T.-L., Lin, W., & Sheen, H.-J. (2014). Developing Digital Courseware for a Virtual Nano-Biotechnology Laboratory: A Design-based Research Approach. *Educational Technology & Society*, *17*(2), 158–168.

Wagh.D.M. (2014). Comparative Study of E-Learning and Classical Teaching Methods in Computer Applications. International Science Congress Association. *Research Journal of Recent Sciences, 3*(ISC-2013), 56-58.

Glossary

CD- ROM: Compact Disc- Read Only Memory

ICT: Information and Communication Technology

LMS: Learning Management System

Copyright Disclaimer