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E-training Implementation in Saudi Arabia: An Exploratory Study in Private Sector in Jeddah

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Abstract
This paper explores the justification for implementing, the benefits and barriers of e-training from training managers working in private sector in Jeddah. The questionnaire was used to gather the data from training managers. Total 150 questionnaires were distributed, out of that 63 questionnaires were used in the analysis. The results showed that the implantation of e-training is growing rapidly in private sector in Jeddah. In addition the results demonstrate that the main drivers for e-training investment were linked to improved delivery and flexibility, increased access, reduced costs, and better administration for implementing training from managers' perspective. However, the most important challenges identified by mangers were related to absence of a professional online training center in Arabic and the lack of expertise in E-training inside the company. Based on the results, a number of recommendations and future research areas were discussed.
Keywords: E-training, E-learning, Implementation, Corporate training, Employee training.

1.1 Introduction

During the last decade, employee training has been adapting to several radical changes and improvements in business environment. One of them is technology which has greatly affected the way training inside the organizations is conducted. Internet technologies and the applications of e-learning in business environment have made fundamental improvements to the way organizations deliver training and to their employees. As organizations try to enhance their competitiveness by constantly promoting continuous learning culture, e-training continues to grow in popularity as organizations attempt to better respond to their immediate and strategic needs for a flexible and competent workforce (Kosarzycki et al., 2002).

Productive training methods are usually the significant for management ensuring that their workforce has the latest competencies. Previous studies have started to evaluate the success of e-learning programs from different stakeholder's perspectives according to various evaluation indicators. For example (Mansour, 2009; Ozturan & Kutlu, 2010) evaluated e-training from learners' perspectives. Other studies (e.g. Ho & Dzeng, 2010; Olafsen & Cetindamar, 2005; Yeung & Jordan, 2006) used other productivity and efficiency metrics including: learning's efficiency, customer service and sales. Some researchers (e.g. Ho & Dzeng, 2010; Lim, 2002; Suanpang, Petocz, & Kalceff, 2004) attempted to compare traditional learning approach with e-training. And finally, some studies analyzed factors influencing the satisfaction and effectiveness of e-learning courseware (e.g. Chiu et al, 2005; Joo et al, 2011).

While it appears that e-learning as a training strategy has several benefits, a number of studies have reported mixed results with e-learning practices. Currently, there is lack of research that examines the effectiveness of e-training program from employer's perspective (Wang et al, 2007). As Michalski (2014) argued that while corporate e-learning research has expanded its areas of focus and interest it is still criticized for its bias towards the functional and technical aspects of e-learning. Accordingly, there is a real need for a research efforts that focuses on one of these underdeveloped research areas: the learning context in which e-training take place. Saudi companies, recently, have moved to E- training as it is widely recognized to be more cost-effective. Despite of this fact, a limited researchers' efforts have been done to evaluate the effectiveness of E-training program in the private working context in Saudi Arabia. Following from the discussions so far, the purpose of this study is to address this gap in the literature by evaluating the implementation of e-training program from employer's perspectives.

1.2 Literature Review

1.2.1 E-training

E-training refers to any type of training provided in organizations via electronic media (Ramayah et al, 2012). E-training involves the use of digital tools for teaching and learning. It makes use of technological tools to enable learners study anytime and anywhere. E-training covers a wide set of applications such as Web-based, computer-based, virtual classrooms, and digital collaboration. It also includes the delivery of content through several methods for instance: Internet, intranet, audio-and videotape, satellite, TV, and CD-ROM. E-training needs to be relevant, accessible, and 'user-friendly'. Employees need to learn how to socialize and collaborate in virtual learning environments. The technology component needs to be well designed, easy to navigate and well supported. It also needs to be standards-based, scalable, and interoperable.

There are different ways of classifying the types of e-learning. Algahtani (2011) divided e-learning into two

basic types, consisting of computer-based and the internet based e-learning. The computer-based learning comprises the use of a full range of hardware and software generally that are available for the use of Information and Communication Technology and also each component can be used in either of two ways: computer managed instruction and computer-assisted-learning. The internet based e-learning is frequently presented in the context of synchronous, asynchronous, or blended learning. Synchronous e-learning models tend to follow the traditional-learning method. Trainers and trainee "meet" at a specified time in a virtual classroom in which they are able to receive information simultaneously and interact directly with other learners (Arkorful and Abaidoo, 2014). Examples of this type of learning method includes for example: virtual classrooms, teleconferencing, Internet chat forums, and two-way live satellite broadcasts of training to audience in a classroom (Ruiz et al., 2006). This type of e-learning, according to Almosa and Almubarak (2005) offers the advantage of immediate feedback.

Unlike the synchronous system, the asynchronous learning is more flexible in that it not necessary requires concurrent participation of all participants and instructors. Asynchronous learning system can help people to learn at anytime, anywhere, at their own convenience. It is therefore not interaction at the same moment but later or with minimum level of interaction with the instructor (Omwenga and Rodrigues, 2006). According to (Kakkar, 2008) this type of e-learning can be implemented through different methods including for instance: a self-paced course, exchanging email messages, and posting messages to a discussion group. (Almosa and Almubarak , 2005; Morse, 2003) argued that the problems in asynchronous e-learning environments are that learners may be less motivated to complete the course because the lack of human interaction and more importantly learners are not provided with immediate feedback on their progress.

Many businesses are now using technology blended with more traditional training methods for their employees (Pulley, 2005). Blended learning can be defined as using a combination of face-to-face and online media for learning. A blended approach to learning allows instructors to use self-paced instruction, along with live collaborative teaching. According to Rasmussen (2012) blended approach that combines traditional delivery and e-learning is necessary for all of an organization's training to ensure: employee access, that the associated infrastructure can cope, that competency is appropriately assessed, learning transfer and learner preferences. Moreover, Rasmussen (2012) asserted that there is also a need to use a blended approach to integrate formal and informal learning so that there are multiple delivery channels with staff having a choice about how they access and interact with materials.

1.2.2 Benefits and barriers of E-training

The benefits of e-training have been widely discussed including: cost-effective access flexibility, freedom to decide when each lesson will be learned, freedom to express thoughts and accessibility to the course's online materials. (Hong et al, 2003; Rosenberg, 2001, Bouhnik and Marcus, 2006, Phillips et al., 2000; Deshwal, 2015). Bandopadhyay and Kumar (2005) noted that Organizations implemented e-training for several reasons, which are: Increase in knowledge, efficiency, productivity of employees, ease of implementation of e-learning programs on the existing IT infrastructure e.g. intranets, time-flexible learning, cost-saving etc." E-learning can support asynchronous training in a cost-efficient way.

Emmanouilidis (2009) suggested that with virtual learning environments, trainees can choose the training pace, the course subjects and self-assessment tests that fit their needs. Additionally, E-learning provides consistency in training (which is particularly important where the workforce is large and geographically dispersed), increased convenience and control of learning for learners, improved monitoring capabilities for employers, and reduced costs by decreasing travel costs and employee absenteeism (Brown and Charlier, 2013). Another benefit is the ability to provide standardized, accredited training across different sites. Accordingly, the potential cost-savings could be used to invest in more training. (Callan and Fergusson, 2009).

Despite the ever increasing practice of using e-training in the workplace, there are some challenges with the implementation of e-training that need to be avoided in order to enhance the e-training effectiveness. According to Ali (2004) these challenges include lack of awareness amongst user, low adoption rate, bandwidth and connectivity limitations, computer illiteracy, lack of quality e-learning content, difficulty in engaging learners online and language barrier. On the other hand, some researchers focused on the human elements of e-training, most of the applications perform poorly in motivating employees to learn. Significant gaps exist between corporate interests and learner needs when it comes to e-learning (Brink et al., 2002; Servage, 2005). And finally, from technical perspectives, (Almutairi and Subramanian, 2005) argued that some technical problems, e.g. slow response from the e-learning system, can create frustration and boredom among users and leads to low satisfaction.

Becker et al., (2013) found that the greatest barriers to e-learning were general concerns about its validity and effectiveness, the lack of interaction compared to traditional learning, and its inability to accommodate some learning styles as well as employees' lack of technology skills. Brown, and Charlier (2013) argued that e-training has drawbacks include higher up-front costs, lack of trainee interaction, and confusion over whether or not providing information constitutes training. Design issues including the technologies used and their reliability are

also key factors.

3. Methodology

The data were collected from a sample of organizations working in private sector in Jeddah. To achieve the study's objective a questionnaire was developed based on the literature review (e.g. Newton and Doonga, 2007). The questionnaire has two sections. The first section has some questions to measure the characteristics of the sample, while the second section measuring the implementations of E-training. The questionnaires was distributed and collected by the researchers, using the E-mail and face to face technique. A total of 150 questionnaires were distributed to training managers. Of these 150 questionnaires, 63 usable questionnaires were returned and used in the analysis. All tests were performed using SPSS. Data analysis included descriptive analysis.

4. Data analysis and Findings

4.1 Sample characteristics

This section is mainly concerned with presenting a descriptive analysis of the sample characteristics. As Table 1 shows 46.8% of organizations capital was below 40 million SR. Number of employees reported by the sample indicated that 50% of the sample has more than 160 employees, 67.6 % of the sample represents the service sector in Jeddah. between. 20-30 years is the highest percentage of organizations age.

Table 1: Sample Characteristics (N=63)

	Percentage		Percentage
Capital in (Million RS)		Number of employee	
1-40	46.8	1-40	11.3
40-80	42.8	40-80	16.1
80-120	4.8	80-120	16.1
120-160	4.8	120-160	6.5
Above 160	19.4	above 160	50
Industry		Years in business	
Commercial	13.8	Less than 7 years	7.7
Services	67.8	10-20	24.6
Industrial	13.8	20-30	38.5
Others	4.6	30-40	23.1
		More than 50 years	6.2

4.2 E-training Infrastructure

Table 2 shows the E-training infrastructure in private sector in Jeddah As the table below shows that 60 organizations have a training budget, while 33 of the total organizations have E-training center and finally more than 41 of organization have a lab training center.

Table 2. E-training Infrastructure

Availability of Internet	Frequency	Training Budget	Frequency
Satellite	25	Yes	60
4G	30	No	3
Others	8		
Availability of E-training Center	Frequency	Availability of Lab Center	Frequency
Yes	33	Yes	41
No	30	No	22

4.3 Ranking and Justification for using E-training.

Table (3) presents the justification of using the E-training inside the private sector in Jeddah

Table 3. Rankings and justification for using e-training

Criteria	Mean	Ranking
Flexibility in where training can be done	4.3	1
Reduced time when staff are absent from the workplace	4.2	2
Ability to better monitor staff training	3.88	3
More engaging method for staff to learn	3.75	4
Better quality of training materials	3.5	5
Access to learning in remote locations	3.5	6
Access to large volumes of training materials	3.46	7

As table (3) presented all justifications categories were perceived very important by the managers, the mean score for all seven categories were above 3. However, the highest mean score was for the first criteria which is focusing on flexibility of training program (Mean=4.3), while the lowest score was for access to large volume of data (Mean = 3.46). Which indicated that managers do not considered access to large volumes of materials as a high priority.

4.4 Benefits and evaluation of using E-training.

Table (4) presents the justification of using the E-training inside the private sector in Jeddah

Table 4: Benefits of using e-training

Criteria	Mean	Ranking
Cost effectiveness of training delivery	4.6	1
Improve in quality of training	4.42	2
Improved staff satisfaction	3.92	3
Improvements in staff performance	3.85	4

Mangers were more concerned about the cost effectiveness and quality of training program (Mean=4.6, 4.4) more than other factors, then followed by the factors related to staff satisfaction and performance, which were ranked on the third and fourth place.

4.5 Obstacle of using E-training

Table (5) presents some E-training obstacles perceived by the managers, as the table below illustrates

Table 5: E-training Obstacles

Criteria	%
Absence of a professional online training center in Arabic	71.8
Lack of expertise in E-training inside the company	69.2
Absence of Training courses in Arabic	34.4
The traditional training is enough	33.3
The higher cost of E-training	28.2
Lack of E-training budget.	15.4

The most important factor is the absence of online E-training center in Arabic, while the lack of training budget was the least obstacle in the private sector in Jeddah.

5. Discussions

This study has addressed the reality of e-training applications in workplace settings in private context in Jeddah. The results indicated that 50 percent of the private companies in Jeddah are using e-trainings. About 30 companies had never applied the use of the e-training, while another 33 companies had successfully implemented this newly developed technology. This indicated that not all of the organizations have already implemented e-training but it is becoming more popular within private sector in Jeddah.

In terms of organization's perspective for the reasons of adapting E-training programs, the main drivers for e-learning investment were linked to improved delivery and flexibility, increased access, reduced costs, and better administration. The results indicated that the most common reason to moving into E-training among training managers was cost saving. These results are consistent with previous studies in which cost saving has been considered as the most common way to evaluate the effectiveness of E-training (e.g. Phillips et al., 2002; Deshwal, 2015). As Deshwal (2015:608) indicated that most companies start to think of online learning primarily as a more efficient way to distribute training inside the organization, making it available "any time", "anywhere" reducing direct costs (instructors, printed materials, training facilities), and indirect costs (travel time, lodging and travel expenses, workforce downtimes)". In fact, most practitioners have suggested that the important ''results'' measures for distance learning programs should primarily consist of cost-saving factors.

Overall, the results and the interview with training managers indicating that e-training methods have brought about large cost savings to their organizations.

In addition to considering cost savings, it is important to examine the quality of learning and outcomes from e-training programs. As the results illustrated most managers rated the quality of training programs as the most important factor to implement the technology inside their organization. Freifeld (2014) argued that E-training can save money while maintaining the quality of training. Indeed, by using the latest technology organizations can track learner progress. However, the results of interviews indicated that large organizations had developed their own e-training programs inside their organizations more than small and medium sized organization did. This means that larger companies in Jeddah are more likely to develop their e-training content in-house to align to their organizational needs and gain competitive advantage. Small and medium-sized enterprises are less committed to e-training and tend to outsource it or purchase solutions because of several reasons (e.g. Lack of expertise).

The major barriers to e-training adoption identified by managers are related to absence of a professional online training center in Arabic and the lack of expertise in E-training inside the company. These results are consistence with the findings of (Clayton and Elliot, 2007) study, which reported the inappropriate technical infrastructure, the support levels required for trainees with limited IT skills, the ability to source appropriate content (mostly SMEs), and a lack of organizational knowledge to support the successful introduction of e-learning. Therefore, organizations in Jeddah should invest heavily in their e-training programs using external designers for its technological infrastructure supported by in-house experts to customize the content of their training program.

6. Conclusions and Recommendations

E-training needs to be carefully managed and planned according to the employee's training assessments needs and the organization's development requirements. As e-training become more complex, the supporting infrastructure need to develop multiple functionality, increased accessibility, interaction and friendly used. The study's findings suggested that e-training can be considered as a better alternative for traditional training because it delivers a better level of knowledge gains more cost-effectively. However, combining and utilizing the strengths of traditional and e-training methods will probably increase the learning level at individual and organizational level.

The study found that the context is very crucial and the implementation of e-learning depend heavily on the actual context. In particular the size of the organizations has clearly emerged as an important factor influence the adapting of e-training programs inside the organizations. Therefore, the study recommend future researches to investigate other contextual factors such as the type of the industry, mixed business organizations or even also in smaller business organizations with different production process or services. This type of research will enhance our knowledge about the importance of context in the implementation of e-training. This also has a theoretical contributions to the growing body of literature in this area with a more holistic view about e-training implementations and a better understanding about success factors and barriers.

This study focused mainly on employer's perspective regarding the implementations of e-training, future research can take other perspectives into consecrations such as employees or/and compare between employees and managers in this regard. This can help in depth understanding for the benefits and barriers of e-training implementations from different stakeholders'. Moreover, another fruitful study area can by measuring the effectiveness of the implementation of e-training through different performance indicators such as ROI, employee satisfaction and performance.

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