Factors affecting employees’ intention to use e-training in organisations

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Abstract

Objective: The success of an e-training system in organisation will largely depends on how acceptable it is to the employees of an organisation. Therefore, understanding what affect employees’ intention to use e-training system is critical for its success. Accordingly, this paper investigates the factors influencing intention to use e-training among employees.

Methods/Statistical Analysis: The paper reviews the extant literature in the field of e-training in order to develop a framework for understanding intention to use e-training. Empirical articles that specifically focused on e-training, online training, and web-based training were given priority while other non-empirical articles were considered based on their relevance and theoretical contributions to the field of e-training.

Findings: The study found that factors including perceived usefulness, trust, perceived ease of use, interactivity, and support are critical in influencing e-training use intention in an organisation. Technology Acceptance Model (TAM) was also found to be the most widely used model in studying intention to use information systems and relevant for studying e-training use intention. Based on the findings, a framework for studying intention to use e-training has been provided.

Applications/Improvements: The paper recommends for empirical testing of the framework to determine its effectiveness in explaining intention to use e-training.

Keywords: E-training, perceived usefulness, computer and internet self-efficacy, trust, and intention to use

1. Introduction

Having a competent workforce is the desire of every modern organisation as the success of an organisation largely hinges on the performance of its human resource management (HRM)[1]. Therefore, it has become incumbent upon the organisations to put in place a mechanism that ensures the availability of an intellectual workforce with the prerequisite knowledge, skills, and ability. One way of doing this is for the organisation to invest in its human resource through the provision of requisite training. Interestingly, the existence of sophisticated technological tools allows organizations to utilize technology to deliver training to their workforce. This process is called e-training which refers to the type of training provided by organisations to their employees through the internet or intranet, computers, recorded past trainings on CD-ROM or flash drive, and other electronic media in order to improve their knowledge and skills for better performance. As organisational demand for corporate alternative methods for learning increases, many corporations have integrated technology for employee training [2] due to its benefits. Generally, the benefits of e-training to an organisation include cost saving, flexibility, employee self-paced training, and increasing the number of trained workers and productivity [3, 4]. However, absence of eye contact and physical human interaction remain the main weaknesses of e-training [5]. Since the essence of every training programme is to improve the skills, performance, and satisfaction of the employee, the success of e-training in organisation depends on the willingness of its workforce to accept and use it. Although not much has been carried out in the field of e-training [6], many studies have investigated factors affecting intention to use various aspects of information system (IS), like e-commerce, websites, mobile banking, e-government, online learning or e-learning, etc. which are related to e-training in some ways. For example, e-training and e-learning have similarities in many ways especially in their methods of delivery and technology used and differ only in terms of time frame whereas e-training takes shorter time to be conducted usually designed for updating work related knowledge and or skill[7]. Many
studies have investigated the various factors influencing intention to use information systems. As a result, many factors were identified as important determinants of intention to use a particular system. Some researchers including are of the opinion that for e-training to be implemented in an organisation, there is a need for effective awareness creation, employee computer and internet self-efficacy, employee designed self-pace e-training contents, and adequate internet connectivity [8]. Similarly, it has been argued that system functionalities, human capabilities and financial resources are important factors that affect e-training acceptance and success [9]. Other researchers have focused on individual behavioural factors such as perceived usefulness and perceived ease of use [10, 11]. This paper considers the behavioural factors influencing individual’s intention to use e-training system. The section below discusses the important factors affecting intention to use e-training as found in the extant literature.

2. Methodology

This study utilised research databases provided by UniversitiTeknologi Malaysia’s library and the Google Scholar for the review. Published articles relating to e-training obtained from these databases from 2010 to 2016 were given priority while prior articles were used based on their relevance and theoretical contributions to the field of e-training. The key words used in the search include “e-training”, online training”, “web-based training”, “e-hrm”, “e-learning for employee”, “electronic training”, results obtained from the first search results were sifted through the use of keywords relating to individual behavioural factors in e-training such as “e-training factors”, “individual factors”, employee factors”, “trainee factors”, “training factors”, “factors in e-training”, “success factors”, and “behavioural factors”. Any article that did not meet the criteria stated above was discarded. The findings from the selected articles were used in identifying the most relevant factors having significant influence on intention to use e-training in organisations.

3. Results

The review shows that that despite the positive effects of e-training, limited empirical works examined factors influencing employees’ intention to use e-training as a prerequisite for any successful implementation [3, 12]. However, perceived usefulness, perceived ease of use[11], computer/internet self-efficacy[13], trust[14], interactivity[15], and support[16] as important factors influencing intention to use an information system. Researchers have also linked these factors are shown in Figure 1 to e-training use intention [3, 17]. The review also discovered that while investigating use intention, most researchers have adopted the TAM in their studies [18, 20]. These factors are discussed.

![Figure 1. Factors driving e-training use intention among employees](www.iseeadyar.org)
3.1. Perceived usefulness

Perceived usefulness is one of the constructs of TAM[10], which simply means that the extent an individual holds making use of a system which would lead to enhancement of his or her job performance. Basically, perceived ease of use and perceived usefulness reflect the extrinsic motivational aspect of specific type of system usage [21]. In the case of e-training, its perceived usefulness by employees is considered very useful for success. For instance, it has been opined that e-training would be perceived by employees as useful if it is easy to use and could lead to reward [3]. Also, PU was reported to have predicted intention and actual use of Web 2.0 tools in the classroom [22] as well as attitude towards behaviour [23, 24]. The influence of perceived usefulness on behavioural intention of technology use has been widely reported in the extent literature. For instance, researchers have established that perceived usefulness as a good predictor of acceptance of systems by individuals [10, 21]. Similarly, it was established that perceived usefulness has positively affected the users’ behavioural intention to use technology systems [25, 26]. Likewise, perceived usefulness and perceived ease of use were found to have affected attitude towards behavioural intention to use social networking media for e-learning [24]. In addition, perceived usefulness was established to have directly affected employees’ intention to use web-based training [19]. On the other hand, it was argued that perceived usefulness might not affect technology use [27]. However, based on the above established evidences, perceived usefulness is considered to be among the important factors influencing intention to use e-training.

3.2. Perceived ease of use

Perceived ease of use (PEOU) means the extent to which an individual holds that his/her use of a particular system would involve less effort [20]. It is one of the constructs of TAM, which proposes that user perceptions of usefulness and ease of use determine the attitudes toward using the system. Drawing from the extant literature in the field of information technology, perceived ease of use has been recognised as one of the major factors that has been used to investigate user behaviour towards technology use [28]. For instance, perceived ease of use and perceived usefulness were both found to have influenced consumers’ initial intention to use [29]. It has been also been reported that most research conducted in the field of IT have confirmed the existence of significant and positive relationships between perceived ease of use, attitude and intention to use e-learning [30]. Perceived ease of use was also reported as an important motivational factor influencing consumers’ technology use intention [31]. Moreover, PEOU was reported as being a key predictor in affecting learners’ behavioural intention to use technology [32, 33]. In contrast to these studies, a study [34] revealed that PEOU has no direct and significant influence on the intention to use the system. It was also established that PEOU was not a good predictor for the student intention to use LMS [35, 36]. Based on the preceding discussion therefore, PEOU is considered as one of the factors influencing employees’ intention to use e-training.

3.3. Computer and internet self-efficacy

On a general basis, self-efficacy denotes the confidence in an individual to handle some given tasks, challenges, and or contexts [37]. Similarly self-efficacy was defined as one’s belief to be capable of performing particular function [38]. Self-efficacy was also argued to be among the critical factors influencing employee training effectiveness [39]. This could be so because understanding self-efficacy in an e-training environment enable us to explain how employees adopt e-training and how they develop the required skills in the use of e-training tools. For instance, computer use experience, internet self-efficacy, and computer anxiety are some individual learner traits that can influence his or her adoption of e-learning, or other new technologies [35]. Likewise, it was reported higher levels of computer self-efficacy are related to higher information and communication technology engagement [38]. Prior studies have confirmed the effects of computer self-efficacy on intention to use a particular technology. For example, a study has found that computer self-efficacy is positively influencing student’s intention to use e-learning systems [40]. Other researchers have reported computer self-efficacy as being a strong predictor of a variety of computing attitudes and beliefs [41, 42]. On the other hand, internet self-efficacy (ISE) refers to user's confidence in his/her skills or knowledge of performing the basic functions of the internetand related applications in an online-based environment for learning [43]. A study has found that users with high ISE preferred online learning environments[44].
Similarly, a study [13] has demonstrated the positive relationship between ISE and attitude towards learning programs that are web-based. Again, it has been argued that positive attitude towards internet and internet-based learning environments are predicted by ISE [45]. However, a study found that ISE did not affect either use of a virtual learning environment or users’ attitudes towards it [46]. Based on the evidences above, the paper opines that computer and internet self-efficacy as one of the independent variables influencing employees’ intention to use e-training.

3.4. Trust

The concept of e-training is meant to provide training to employees regardless of the time and their geographical locations and at their own pace. Since e-training is facilitated through the use of technology which include largely, the use of the internet or intranet, CD-ROM etc., it is likely that challenges relating to ethical issues [47] and security as some aspects of training programs will demand submitting personal information or views. As the case is with various ITs, it is equally important to investigate if users’ trust on security and privacy of e-training will influence their adoption [48]. In terms of IS, trust has been defined as the degree to which system user has positive belief in the system characteristics, information and the honesty of the suppliers [49]. Trust has been reported as one of the major reasons advanced for users’ resistance information systems use [50]. In a situation employees are required to participate in mandatory-use systems, for example e-training, trust becomes more important because, when employees do not trust a system they tend to do something else [51]. Earning employee’s trust could therefore be a solution to the fears raised above. In the case of online learning, trust was consistently found to be a vital parameter [52]. Also, it was opined that trust is a key determinant of adoption and continuance use of e-commerce [53]. In the field of e-learning, trust has been found as an initial prerequisite for users to participate in knowledge transferring and exchanging [54]. In another study, it was established that trust has a significant effects on attitude towards using E-HRM [14]. In supporting the influence of trust in an organisational setting, it has been opined that trust is an intermediary factor because the organisation must build trust in employees first before they become affectively committed [55]. This paper opines that trust will have influence over intention to use e-training among employees.

3.5. Interactivity

The importance of interaction in learning and training cannot be overemphasised. For example, it was reported that that interaction is relevant to all forms of learning, whether such learning involves technology or not [56]. Likewise, it has been argued that interactivity is a necessary and fundamental mechanism for knowledge acquisition and development of cognitive and physical skills [57]. In this study, interactivity refers to the extent to which an e-training system facilitates easy communication between trainee and trainee, trainee and trainer, and trainee and tools of e-training system anywhere any time. Past studies have reported that interaction plays an important role in both face-to-face and online learning situations [17]. The most widely applied framework for understanding interaction in online learning is the model [58] which proposed three important aspects of interaction namely, interaction based on student and instructor, interaction based on student and student and interaction between student and content. The student and instructor interaction describes the communication between the instructor of the course and learners and vice versa, student-student interaction explains the two-way reciprocal communication among the students, with or without the presence of an instructor, while the student and content based interaction simply means the one-way process of understanding the contents of the course. Past studies have revealed that the dimensions of interactivity have positive influence upon users’ attitudes and usage intentions [15]. Also enhanced level of interaction perceived by a student was reported to have increased the intention to use e-learning systems [59]. However, it has been have demonstrated that perceived interactivity has no impact neither on the perceived ease of use nor on perceived usefulness [60]. Based on the above evidences, this paper suggests that interactivity has influence on technology user’s attitude and may affect users’ acceptance of technology as a channel through which training is provided to employees.

3.6. Support

Providing support in the case of e-training could be of importance especially to those without adequate knowledge and or skills of using computer and the internet. To this category of employees, technical support and guidance throughout an e-training program could be of critical importance. It was opined that the essence of investments made in technology by organisations in order to support their learning will not produce any meaningful
results if those intended for (employees) do not accept and make use of the technology in the workplace [61]. There are different types of support in the literature, for example, three categories of support were identified; sources of support, university support and support from instructors [62]. Similarly, various types of support, such as help desks, hotlines, machine-readable support knowledge bases, telephone voice response systems, online support services, more training hours, induction weeks and the availability of staff experienced in the use of virtual learning environments were reported [63]. Likewise, it was reported that providing support in terms of required resources, providing training to employees, putting right mechanism for getting positive feedback, incentives, and clear goals setting lead attainment of goals and strengthen technology use among employees[64, 65]. Relationship existing between support and intention to use a particular technology and its actual use has been established [66]. Furthermore, found a significant relationship between management support and intention to adopt and actual use was found [16]. In addition, university support was found to be a significant predictor of e-learning adoption [67]. Therefore, from the preceding discussion, it is reasonable to conclude that the quality of the university support will be an important determinant of e-training use.

4. Discussion

Based on the above, the factors of perceived usefulness, perceived ease of use, computer/internet self-efficacy, interactivity, and trust are the most important factors that shape employees’ intention to use e-training. Employees are likely to accept and use e-training when they are convinced that the new system is useful and will have positive impact on them. On the other hand, if the employees perceive that the new system will negatively affect them, they may likely resist its usage. Also, the employees may have positive intention to use the new system when its use is perceived to be easy just as they may want to avoid its use when they feel that using e-training system would be difficult. Similarly, high employee self-efficacy in using a computer and the internet may create positive behaviour towards using e-training while those employees having low computer/internet self-efficacy may tend to resist its application. Again, the interactive nature of the e-training system could lead to positive behaviour towards its usage as the employees will have more confidence using the system if they can easily interact with other trainees, the trainers, as well as the system interface. Another important factor is the level of support the employees receive from the organisation to facilitate successful use of e-training. The ability to provide adequate information on the e-training system and its importance could, for instance, help reduce negative perceptions and likely resistance against the new system among employees. Moreover, the level of trust of e-training will reduce the instances of avoidance among employees since that will remove the fear of the unknown that always come with the introduction of new system in organisations.

5. Conclusion

The study discusses the need to identify and understand the important factors that influence positive behaviour towards e-training in organisation. A framework for understanding intention to use e-training has been presented in the paper. It posits that trust, interactivity, organisational support, computer/internet self-efficacy, perceived ease of use, and perceived usefulness influence employees’ intention to use e-training in organisation. The study recommends for further research to empirically test the applicability and effectiveness of the framework in organisations.

6. References


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