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E-learning System Acceptance Factors for Training: A Study of Employees Perception in Tourism Industry

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Abstract:

Training is critical in tourism industry to stay ahead of competitors. Having state of art technology and Internet set foundation for e-learning systems for training purposes. This paper focuses on the acceptance of e-learning systems for training in e-tourism companies. Building upon TAM, a framework is developed and survey helps to provide evidence for present research. Findings emphasize on the necessity of computing experience, attitude, and motivation among employees to accept e-learning systems as a tool of training. Finally, the success of e-training lies in the hand of every single individual within organization and the discussion is available.

Keywords: acceptance; e-learning; e-tourism; training.

JEL Classification: L83; Z32

Introduction

The concept of lifelong learning is emerging as a trend in today competitive world. With presence of Internet in most countries over the world, people can easy access information anytime and anywhere. Internet brings a lot of benefits

to users (Lee and Kim 2015). They can use the power of internet to share information, communicate, organize and access a wide range of learning resources, or for sales or purchasing opportunities. The availability of electronic web-enabling technologies and internet has huge influence on the success of web-based education and training (Burton-Jones 2001, Ingrassia, Foletti *et al.* 2014). Applying the advantages of internet, many e-learning programs are widely offered at education institutions and companies today *(Derouin, Fritzsche et al. 2005, Tzeng, Chiang et al.* 2007). Since internet is changing almost everything about modern life (Carr 2010), we should not be too surprised that it is changing how people learn.

E-learning and e-training are two tools which are popularly used worldwide today to quench the endless quest for knowledge (Nof, Ceroni *et al.* 2015). Many companies have jumped to the e-learning bandwagon as they perceive that e-learning is the training method most suitable to serve the era of globalization (Meyen, Aust *et al.* 2002, Lim, Lee *et al.* 2007, Garrison 2011). Electronic learning or e-learning encompasses a wide area which is supported by information and communications technology (ICT), however in this paper e-learning is taken to include any form of learning which includes electronic technology which does not include any of the traditional chalk and blackboard method.

Although many have jumped into the e-learning bandwagon, very few organizations have actually evaluated the acceptance of training via e-learning (Kasprisin, Single *et al.* 2003, Hamburg, Engert *et al.* 2008). And out of the handful that have actually conducted a study to gauge the acceptance of e-learning, some find it to be very successful, while others find it to be a failure. Learning at work place includes all forms of learning activity that takes place within the working context (Billett 2001). (Engeström 2001) have broken workplace learning into two categories, learning at work and learning in work.

Learning at work describes learning that occurs at the place of work on formal courses and in classrooms, whereas learning in work refers to embedded learning in work processes such as on the job training and mentoring (Engeström 2001). The success of e-learning as a corporate training tool is dependent on many factors (Dublin 2008), ranging from user acceptance, management's perspective; the e-learning courses itself and many others. What factors are required to make e-learning as a successful training tool and what factors that contributes to its failure? This paper plans to evaluate the acceptance of e-learning as a corporate training tool in e-tourism context.

In order to achieve the challenges of the coming years e-tourism companies have and will be investing heavily in its human capital. Training has been identified as one of the key methods to build up an efficient work force. E-learning is part of the plan to build up its human capital (Raab, Ellis *et al.* 2001, Capece and Campisi 2013). However not many employees effectively use e-learning as part of their training plans. It has been established during the initial study that the acceptance towards e-learning is not as high as anticipated. The amount of money spent in investing in the e-learning systems is very huge, therefore it is important to find out why the investment failed to achieve its objective.

The training departments have implemented e-learning and yet it failed to achieve the desired level of acceptance, the answer lies in method of implementation of e-learning in e-tourism companies. The e-learning implementation was done without taking into consideration factors such as user acceptance, employee motivation to use e-learning, employee's computing background and attitude towards e-learning. E-learning was just thrown into the hands of employees and they were left alone to adapt to it. They were not guided to change their learning mode from class room based training along with a group of colleagues to learning from a computer alone. This has resulted in poor acceptance, this study hopes to provide insights to improve the implementation of e-learning in e-tourism companies with the objective of improving its overall acceptance, thus making the investment made in e-learning worthwhile and perhaps good enough for a further investment in the future.

1. E-Learning Acceptance for Training

User acceptance is defined as "the demonstrate willingness within a user group to employ information technology for the tasks it is designed to support. Many researches have been done on the acceptance of new technologies and their failures, one of the models used to explain the acceptance of new technologies the Technology Acceptance Model (TAM) (Venkatesh and Davis 2000). The technology acceptance model is one of the most popular extensions of the theory of reasoned action (TRA) in the field of information systems (Hausenblas, Carron *et al.* 1997). The TRA explains behaviour across behavioral intentions; it states that an external stimulus influences a person's attitude toward behaviour indirectly by influencing his or her salient beliefs about the consequences of performing the behaviour. Current study signified that only high-quality website cannot ensure continuance purchasing behaviour. Consequently, underlying factors such as information richness and trust need further investigation (Moradi *et al.* 2017).

Technology Acceptance Model was developed by (Hausenblas, Carron *et al.* 1997). TAM measures the acceptance by using two measures ease of use and usefulness. According to TAM a user's overall attitude toward using a system is hypothesized to be determined as whether he actually uses it or otherwise. Attitude in turn is a function that is derived from perceived usefulness and perceived ease of use (Yang and Yoo 2004). Perceived ease of use has a causal effect on perceived usefulness (Fenech 1998). System design features directly influence perceived usefulness and perceived ease of use.

The basics of TAM is that when users are presented with a new software package, a number of factors will decide on how and when they will use it. Perceived usefulness and perceived ease of use are two main factors used in TAM to explain user acceptance towards new technology (Venkatesh, Morris *et al.* 2003). Perceived usefulness was defined by Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". Perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free from effort". Other research done by Segars and Grover (1993) added that besides perceived usefulness and ease of use, effectiveness also played an important part in user acceptance. Building upon TAM, this paper investigated several factors that affect the acceptance of systems. Following sections will describe the factors in brief.

2. Computing Background

Research shows that prior computing experience has an effect on the acceptance of systems. Computing skills directly influence the usage of Cyber Train directly or indirectly as they have an influence on ease of use and perceived usefulness. A research done by Oly Ndubisi and Jantan (2003), Raisian *et al.* 2013, Raisian *et al.* 2016bs show that employee usage of IT systems in Malaysian small and medium firms is influenced by computing skills and technical backing. Igbaria and Iivari (1995) carried out research on computer self-efficacy's impact on an individual's computer anxiety which influences the perceived ease of use, perceived usefulness and systems usage. According to research done by Bagozzi (1981), prior experience is an important determinant of user acceptance of system technology. Perceptions indeed become more evident by personal experience.

Bergeron and Raymond (1992) study revealed that personal computer training has a positive impact on perception and technology acceptance. Reports have shown that systems are more successful when user computing support was included in new technology roll outs. A study conducted by Agarwal and Prasad (1999) on employee adoption to new workstation operating systems revealed that an individual's previous computer experience positively influenced perceptions of ease of use and usefulness. Study by Moore and Benbasat (1991) revealed that adopters of innovative technology are more likely to perceive that the technology was easy to use and this provided an advantage compared to non-adopters.

In e-tourism context, changing from traditional ways of doing thing to computer based has been happening many times throughout the last few years. For instance, hotel booking and reservation has been converted from manual paper based method to web based application. Even the forms which are needed to complete other important paper work is now available in the Internet (E–Forms). The approval of these forms are electronically triggered, this is very much different than previous method where the forms are printed and signatures has to be obtained manually, meaning that the applicant has to bring the form physically from one approver to the other by himself or herself.

The most recent change that has taken place is the change of performance management where all goals and performance evaluation in companies are done online, instead of being done on paper as before. A person who faces difficulty or had a bad experience with electronic based systems may shun using electronic facilities if he was given a chance, whereas a person who had good experience such as saving of time and find the electronic systems used previously more efficient has a tendency to be more positive about learning electronically.

The first experience with e-learning also determines their subsequent behavior towards e-learning. Christine Sullivan from Hawthorne Associates explained that when people are confronted with hundreds of courses, they will be overwhelmed and tune out. The approach of "build it and they will come?" does not work; one way to solve this problem is to match the needed individual's skills with appropriate course modules. This means that each person will have their own personalized curriculum; they can also seek the help of their supervisors to identify the skills gap and undertake modules to narrow down the identified gap. To ensure that their first e-learning experience is not a boring and dull one, the courses can be broken down to smaller chunks. Oracle has successfully done this where courses are broken down into smaller segments which can be completed in shorter time.

3. Attitude

Attitude is said to play a central role in the acceptance process, attitude guides perceptions, information processing and behavior. In the context of system acceptance, Ajzen (1989) described attitude as a pre-disposition to respond favorably or unfavorably to an object, person, event, institution or other discriminate aspect of the individual's world. Davis studies shown that perceived ease of use and perceived usefulness indirectly affect the attitudes towards new technologies. Perceived usefulness positively will influence attitude and intention to use the Web based learning technology and perceived ease of use will positively influence perceived usefulness and attitude for the technology. And in turn attitude will positively influence intention to use and intention to use will positively influence the actual behavioral variable, using new IT based technologies which in this case in e-learning.

4. Motivation

Since TAM was introduced, various models of TAM has been introduced, for example Davis, Bagozzi *et al.* (1992) proposed a new model, motivational model where one factor was renamed and one additional factor was added. The two new factors are extrinsic motivation and intrinsic motivation, extrinsic motivation describes an individual's personal gain associated with the use of a particular technology and it replaced perceived usefulness. Whereas intrinsic motivation describes the perceived enjoyment associated to the use of particular technology itself which is different from possible performance outcome of the use.

Venkatesh, Speier *et al.* (2002) introduced an integrated TAM where intrinsic motivation is included to the original model where intrinsic motivation includes enjoyment from the system, pleasance of systems of use and fun of system use. Intrinsically motivated people may perceive that the use of new technology less difficult than others since they enjoy using it. Individuals who experience pleasure and joy from using the machine and perceive any activity involving use of microcomputers as enjoyable will more it more extensively than others.

5. Research Method

Research method refers for the investigating perspectives which must be suitable to the study (Raisian and Yahaya 2015, Raisian and Yahaya 2016, Raisian *et al.* 2016a). A theoretical framework is proposed for this study to accommodate the logical sense behind the relationships among different factors under this research. This framework supports in accurately proposing the hypothesis and in understanding the situation supported by Uma and Roger (2003). As stated in (Collis and Hussey 2013), a theoretical framework would allow the measurement and observation through the assigning of values to the variables. Moreover, in this study, staffs from tourism industry, who are using e-learning for training purposes had been chosen.

This study uses convenience sampling for target employees, who are working in tourism industry. Following the learners' perception, a primary data using survey technique is gathered to evaluate the e-learning content acceptance level. Online-based questionnaires are distributed among learners to get the views and comment of them in e-learning content. During the data collection process, issues pertaining to privacy and ethics might arise. All respondents were assured that all information provided will be treated in confidence and is only for the purpose of this study.

Any report which is a result of this study will not be associated to any single individual. However, any respondent who did not feel comfortable disclosing any information or felt uncomfortable answering the questionnaire on the whole was free to withdraw from the study. A brief description of the questionnaire and its objectives are stated on the front page. Assurance was given that individual privacy will be maintained. During the data analysis stage, information provided was handled objectively and all response were treated equally and treated with strict confidence. This study adopted five-point Likert-type scale for rating to eliminate the potential error in scores received from the self-report assessment. The survey items adopted are related to e-learning for training of employees in tourism industry. The measures are adopted from Davis, Bagozzi *et al.* (1992), Venkatesh, Speier *et al.* (2002), Ajzen (1989), Oly Ndubisi and Jantan (2003).

6. Results

To ensure the consistency, dependability, or stability of the instrument, a reliability test was employed in this study. Specifically and Cronbach's alpha (Cronbach 1951) test was used. Value closer to 1 shows higher internal consistency. A threshold level of 0.6 as recommended in (Hair 2010) work was followed in this research. All scores retrieved from measures were above threshold level of 0.6 indicating internal consistency of the data recommended in (Hair, Sarstedt *et al.* 2012). Since the instrument used were from validated items of well-cited articles, the content validity was ensure. All average variance extracted (AVE) extracted were above threshold (0.5), therefore convergent validity was held recommended by Fornell and Larcker (1981).

As it is not feasible to obtain feedback from all e-tourism related employees, a set of 500 questionnaires were distributed online. Out of 500 surveys, only 229 usable survey were reverted. Among all respondents, 146 (63.8percent) were men participated, whereas 83 (36.2percent) were female respondents. The result of analysis on experience level showed 69 (30.1 percent) of respondents had less than 5 years of experience. 78 (34.1 percent) of participants had 5 to 10 years of experience, whereas 64 (27.9 percent) worked for 11 to 15 years, followed by 18 (7.9%) with more than 15 years of experience. In terms of education level, 36 (15.7 percent) of sample acquired diploma, 77 (33.6 percent) were college graduates; 51 (22.3 percent) were degree holder; 41 (20.6 percent) were post-graduates followed by 19 (8.3 percent) with other certificates. More than half of respondents were educated with higher level of experience. This trend showed that people with higher level of education and experience tend to accept e-learning methods in training within e-tourism companies.

7. Hypotheses Testing

Based on (Raisian *et al.* 2014) hypothesis is critical approach to clear research goal Table 2 illustrates summary of the results of hypotheses testing for this research. The findings show that the positive correlation of user acceptance enablers of e-learning for training in e-tourism industry existed. The statistics represent strong estimates with p-value of less than 0.01 suggesting that computing background, attitude, intrinsic motivation, and extrinsic motivation highly affects employees' perceived ease and usefulness of e-learning for training in e-tourism companies. It then may translate as higher acceptance rate of e-learning for training in said industry.

Table 1. Hypotheses Test Results

Hypotheses	Weight (P-value)	Result
H1: A direct correlation exists between the Computing Background and employees' perceived ease and usefulness of e-learning for training in e-tourism companies.	0.486 (0.000)	Supported
H2: A direct correlation exists between the Attitude and employees' perceived ease and usefulness of e-learning for training in e-tourism companies.	0.545 (0.000)	Supported
H3: A direct correlation exists between the Intrinsic Motivation and employees' perceived ease and usefulness of e-learning for training in e-tourism companies.	0.334 (0.000)	Supported
H4: A direct correlation exists between the Extrinsic Motivation and employees' perceived ease and usefulness of e-learning for training in e-tourism companies.	0.332 (0.0001)	Supported
H5: A direct correlation exists between the employees' perceived ease and usefulness of e-learning and their acceptance of e-learning for training.	0.538 (0.0001)	Supported

Additional results provided evidence for goodness-of-fit indices which were aligned with rule of thumbs. The values of CFI (0.956 > 0.90) and AGFI (0.837 > 0.80) followed the suggested threshold by Bentler (1988). The $\chi 2/df$ =1.398 was lower than 2.0 showing that the goodness-of-fit indices were in range and good fit of the data ensured for this research.

8. Discussion

The finding shows that the usage of e-learning, even though new in tourism industry, is indeed attractive. Yet, the participants have stated that technical courses are not suitable to be carried out via e-learning. Time has been the number one reason preventing users from embarking on e-learning activities; others blamed the lack of awareness created by the training department. However, the most important fact gathered is that their preferred method of training is shifted from classroom-based to online training. Additionally, the findings indicated that education and experience does play a role in user's acceptance in e-learning.

In terms of gender no significant differences were found. To date most of users in e-tourism companies are not segregated by gender, gender polarization where the perception about a man and women have different capabilities due to their physical structure is no longer accepted. Gender blurring is more common, where man and women are treated equally. Women today boldly venture into male dominated fields and vice versa, while men are slowly experimenting roles that are traditionally reserved for women, such as child care and the role of a home maker.

The role of gender is blurred and this is especially true in a virtual environment such as e-learning where the gender of the learner can remain unknown. In e-tourism environment, the role an employee is not tied down to the sex, a female advisor is given the same task and set of responsibilities of a male advisor, this explains why gender does not play a significant role in user's acceptance of e-learning.

The study has shown that employees with different levels of computing skills show significant difference in the acceptance of e-learning. The reason could be that not everyone today is well skilled in e-learning training, therefore computing skills is an added advantage. Other factors such as time and preferred method learning could play a significant role as well. The research finding also shows that intrinsic motivation has significant relationship with user acceptance of e-learning.

Motivation drives the employees to sign up for e-courses, however due to other factors such as lack of time, many do not have the time to complete the courses. Employees have a sense of determination towards e-learning, they feel e-learning provides with some knowledge which will bring them some good in some ways. However, since the training department of tourism companies usually do not have a structured program to encourage users to utilize e-learning, and motivate the employees to participate in e-learning, any effort for participation is truly self-directed. Therefore, intrinsic motivation does have an impact on user's acceptance towards e-learning.

In addition, the study shows that extrinsic motivation has a significant impact on user's acceptance towards e-learning. Only a handful of employees who have external motivation, this comes in the form of being forced to complete a certain number of courses as it has been set a part of their deliverables for the year, thus it has an impact on their performance evaluation. Whereas for others, it is a pre-requisite for promotion, they must complete the courses assigned to them as part of the many criteria to be eligible for promotion.

The strength of the relationship between extrinsic motivation and user acceptance of e-learning is slightly weaker than intrinsic motivation. This could be explained that extrinsic motivation has only a short effect on acceptance, as soon as the reward has been secured, the employees do not have any more motivation to pursue e-learning. The findings also indicated that attitude has significant impact on user's acceptance on e-learning. Attitude is defined as a lasting pattern of feelings, beliefs and behaviour towards certain people, ideas or objects.

As the study shows motivation does not have a more significant impact on user's acceptance compared to attitude, this could be due to the fact that attitudes are formed across time and is not something that can be changed overnight, to change one's attitude one must be receptive, otherwise it will be very difficult to change one's attitude. The alternative is that the person who wants to change the attitude, the communicator must be very persuasive. Since e-learning is a truly self-directed method of learning in e-tourism companies, meaning there is an absence of the communicator; motivation could not possibly overcome the respondent's attitude towards e-learning.

Even though the study shows that the acceptance of e-learning in training process is satisfactory, some steps must be taken to increase the usage of Cyber Train. Human capital investment is no doubt the way to maintain market leadership in the years to come, however care should be taken to ensure that the investment is worthwhile, the following are some recommendations to improve the acceptance level of e-learning.

The training department needs to play a more active role in creating awareness on the benefits of e-training to the employees and the organization on the whole. They need to face the fact that employees are not matured enough to embark on a self-directed learning mode, the employees need to be spoon fed. Available communication channels must be fully utilized, such as briefings, statements, e-mail announcement and in-house newsletters. Introduction of new courses and their outlines can be dispersed via these channels to promote e-learning.

All the world class training materials and support tools to support e-learning would be a total waste if top management does not openly support e-learning. One of the best ways to encourage e-learning is to lead by example, if managers and supervisor utilize e-training as part of their training activity, sure enough subordinate will have the drive to do the same. However extra care must be taken to ensure that when the courses for managers are of good quality and worthwhile, once the management level is convinced that e-learning is worthy, they would be in a better position to promote it to their down liners.

Environment must be conducive to promote e-learning, surprisingly the survey revealed that the companies' workstations could not support e-learning whereas a majority of them blamed it on time. Perhaps pilot studies need to be carried out to see if time allocation was provided by supervisors, will the employees actually utilize e-learning, or were they just using it as a lame excuse. Remote e-learning, away from the office is possible way, unfortunately not many employees do it. Some are not aware of it, while many others do not know how to go about it; e-mails and memos should be disseminated to all employees reminding that remote e-learning is possible outside the office. Assigning dedicated staff to assist employees to guide employees to get connected remotely would be an excellent way to encourage e-learning outside the office and outside the normal working hours' time frame.

Conclusion

The implementation of an e-learning system alone will not guarantee the success of e-tourism companies. Besides, leaving it in to the hands of the training department to ensure that the training via e-learning system is accepted as a corporate training tool is unfair. Success of e-training lies in the hand of every single person in e-tourism companies, the push must come from above, the management, and driven down to the lower level. Offering cyber training as a buffet lunch with "the come and get it if you wish" theme cannot be the case, the way to go would be to draw out specific learning plan for each employee and reintroduce cyber training with a brand-new image which portrays that it pays to learn online to both the employee and the organization and hopefully this helps to turnaround the acceptance of e-learning in e-tourism context.
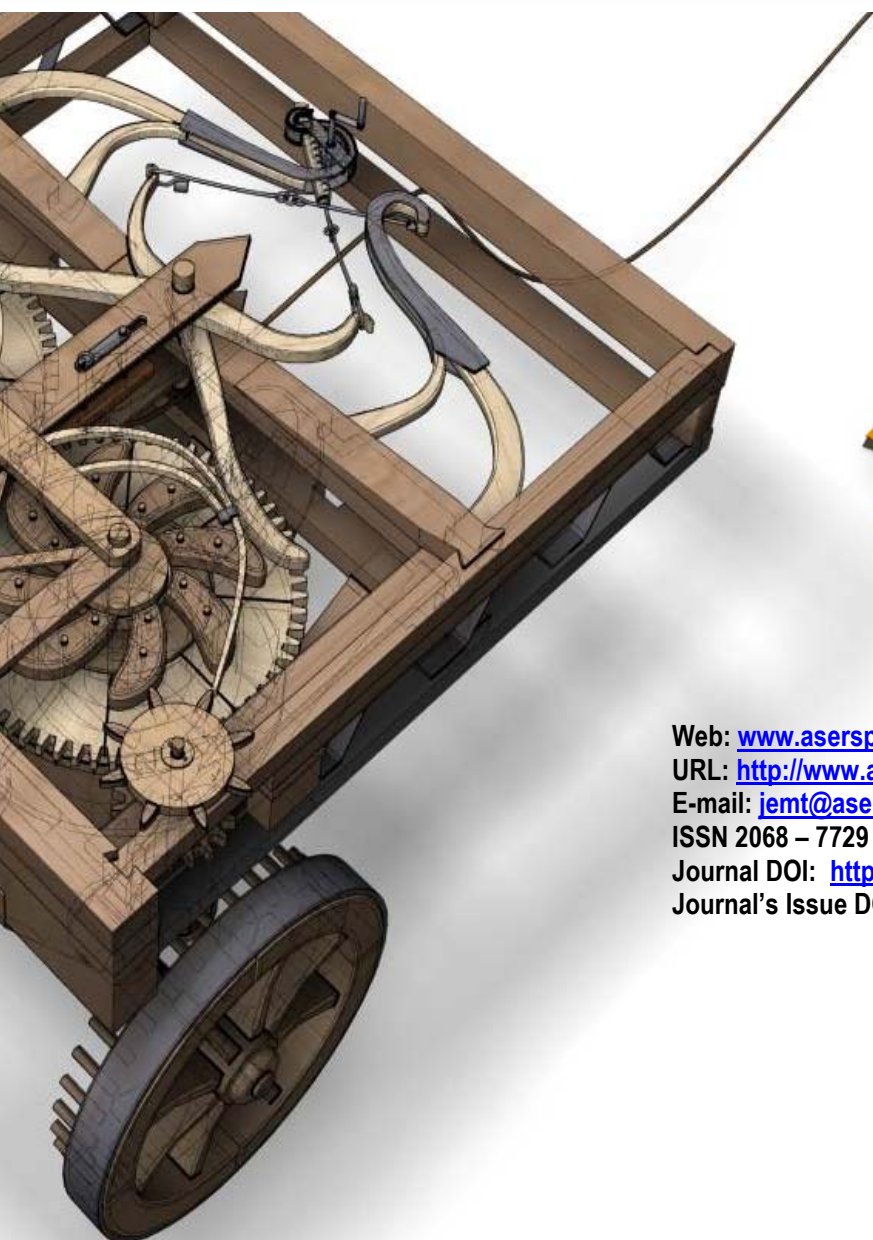
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