**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in:** ***Finance and Banking***

# Factors influencing onacceptance of e-learning system among Clerksin Financial institution: A case study of banks in Shiraz city

Sarkari, Malihe

Mehralborz University, Tehran, Iran, Sanaz.sarkari@gmail.com

Dr.Amini Lari,Mansoor

Department of Computer and Information, Technology, Science and Research Branch,Islamic Azad University, Fars, Iran, aminilari@gmail.com

Dr.Alireza Miremadi

Head of Department & Assistant Marketing professor at Sharif University of Technology-International Campus, Iran, armiremadi@sharif.edu

**Abstract:** Banking industry is a knowledge-based industry that has turned to electronic education in recent years. The level of the staff's acceptance for utilizing such educational methods has always been a matter of great concern for the managers. Members of staff would prefer electronic education to traditional and conventional methods if they find them in sync with their present demands and requirements. They also need to be stimulated for this purpose. The objective of this paper is to analyze a number of models and theories with respect to accepting technology and disseminating innovation in organizations, and present and measure the most effective factors in the acceptance of bank clerks for adopting electronic learningservices in Shiraz. These factors include: perceived usefulness, perceived playfulness, educational level, trust, visibility, compatibility, voluntariness of useand overload working. The results of such analysis would be presented. More practical propositions and also proposal for future studies would be presented in this paper.

**Key Words:** e-learning, Technology acceptance, clerk acceptance, Banks, Customer Satisfaction, Strategy.

## I.Introduction

The last few years have seen a rapid expansion in e-learning courses offered to bank employees byUsing Internet, Intranet or magnetic media.The development of IT provided for theimplementation of modern ways of learning inbanks. Banks attach great importance to training members of their sales force because to a large extent the success of the sales policy depends on them. In the reality of commoditized banking products and increasing global regulation, IT professionals and business leaders in the banking industry must invest in the right technologies to support growth, preserve margins and aid compliance of human capital with corporate objectives [12].

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in: *Finance and Banking***

There is no doubt that e-learning can replace part of the traditional classroom training But organizations increasingly are investing in e-learning, implementing it, using it, and, frequently, regretting their involvement in it. So organizations have to be ready adopt e-learning to benefit from it and to prevent cost overrun and failure. Successful adopting of e-learning requires that the organization's e-learning readiness has to be measured first.

The objective of this paper is to analyze a number of models and theories with respect to accepting technology and disseminating innovation in organizations, and present and measure the most effective factors in the acceptance of bank clerks for adopting electronic learning services in Shiraz city.In the following, we review in detail the information systems acceptance literature in an e-learning context which our research model is based.

## II. Theoretical background

### A. Information systems acceptance

Information systems are introduced to an organization for various reasons: automate procedures, improve efficiency and effectiveness, and increase workforce performance. Some systems are adopted in order to establish a particular way of doing business, through making their use mandatory and inevitable. Other times, using the system is not obligatory and depends on the voluntary use of employees. To this end, people tend to use an application or not based on their beliefs whether it will enhance their job performance [7].

Generally, people are sometimes unwilling to accept and use systems, even if they would improve their job performance or relieve them from demanding and time-consuming tasks[22].

There are several studies in information systems acceptance context. One of the most studies is for technology acceptance model (TAM). TAM was introduced by Davis (1986) to explain computer-usage behavior. TAM proposes external variables as the basis for tracing the impact of external factors on two main internal beliefs, perceived usefulness and perceived ease of use. According to Davis, perceived ease of use is the degree to which a person believes that using aparticular system would be free of effort and perceived usefulness is the degree to which a person believes that using a particular systemwould enhance his or her job performance. These two beliefs both influence users' attitude toward using information systems (IS).

Despite the potential of e-learning as a tool to enhance education and training performance, its value will not be realized if users do not accept it as a learning tool. Since e-learning utilizes information technology, TAM has been extensively utilized and extended for research in an e-learning context. The two TAM constructs (perceived usefulness and ease of use) were applied to assess university students' acceptance of course websites as an effective learning tool [31]. Results revealed that perceived usefulness and ease of use of course website proved to be key determinants of the acceptance and usage of course website as an effective and efficient learning technology.

Next, a widely known extended TA model called TAM2 will be discussed. TAM2 was developed by adding social influences (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived ease of use) to predict the adoption of an information technology. In voluntary contexts, social influences can influence intention indirectly through the mechanism of internalization and identification [34].

Diffusion of Innovations is another theory that explained by Rogers. Rogers seeks to explain

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in: *Finance and Banking***

how, why, and at what rate new ideas and technology spread through cultures. He said diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Rogers defines an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption the origins of the diffusion of innovations theory are varied and span multiple disciplines. This process relies heavily on human capital. The innovation must be widely adopted in order to self-sustain[29].

Rogers defines five intrinsic characteristics of innovations that influence an individual's decision to adopt or reject an innovation (table1).

Table 1: Five intrinsic characteristics of innovations(Rogers, 1995)

| Factor | Definition |
|---|---|
| Relative Advantage | How improved an innovation is over the previous generation. |
| Compatibility | The level of compatibility that an innovation has to be assimilated into an individual's life. |
| Complexity | If the innovation is perceived as complicated or difficult to use, an individual is unlikely to adopt it. |
| Trialability | How easily an innovation may be experimented. If a user is able to test an innovation, the individual will be more likely to adopt it. |
| Visibility | The extent that an innovation is visible to others. An innovation that is more visible will drive communication among the individual's peers and personal networks and will in turn create more positive or negative reactions. |

Additionally two factors determine what type a particular decision is:Whether the decision is made freely and implemented voluntarily, and who makes the decision.Based on these considerations, some types of innovation-decisions have been identified within diffusion of innovations.Innovations are often adopted by organizations through two types of innovation-decisions: collective innovation decisions and authority innovation decisions. The collective innovation decision occurs when the adoption of an innovation has been made by a consensus among the members of an organization. The authority-innovation decision occurs when the adoption of an innovation has been made by very few individuals with high positions of power within an organization. Diffusion of Innovations manifests itself in different ways in various cultures and fields and is highly subjective to the type of adopters and innovation-decision process.

Flow theory is another theory that emphasizes the role of a specific context rather than individual differences in explaining human motivated behaviors. Flow Theory was defined 'flow' as ''the holistic sensation that people feel when they act with total involvement

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in: *Finance and Banking***

[4].While a number of researchers suggested methodologies and measurement items to measure flow, there has not been a universal measurementtool. Playfulness is a concept that is used most widely to measure flow. Playfulness is a complex variable which includes individual'spleasure, psychological stimulation, and interests [5]. Playfulness is a situationalcharacteristic of the interaction between an individual and the situation [23].A few e-learning studies address contribution of playfulness to instructors' and learners' acceptance of e-learning service but their results showed perceived enjoyment significantly and directly impacted their acceptance of e-learningservices [17].

In the context of information systems, literature has indicated a number of factors that affected on using new information systems in organizational context like: the personal innovativeness with IT [1, 18], trust [27], Computer anxiety, intrinsic motivation, demographic characteristics like: gender, age, educational level [37], etc. Additionally, work specific factors as work overload [2, 24], and time resources [27] have been also proposed in the literature as issues affecting indirectly the acceptance of information systems.

### B. e-learning

E-Learning is typically employed through online learning courses, in synchronous (e.g. virtualclassrooms) and asynchronous formats, and in the context of Web 2.0 through informal learning tools, like wikis and blogs. This technology can be used stand-alone or complementary to other training modes, in order to mitigate the skill shortage that several banks are recently facing as a result of particular organizational transformations, e.g. from bureaucratic to customer-oriented [26].This training has twin objectives: skill acquisition through an individualized course and reduced training costs [15]. The effectiveness of e-learning depends on establishing two-waycommunication between teachers and learners, and among learnersthemselves.Many of the technologies used in e-learning courses include: Email , Collaborative learning forums, message boards, chat or forums, threaded discussions, E-boards, Application sharing, Simulations or virtual laboratories, Library/learning session cache access , Real-time tests and evaluation, Video and audio streaming [33].

## III. Hypotheses and conceptual framework

Based on the theoretical components of the Technology Acceptance Model, this studyproposed the following hypotheses with regard to Factors affecting the acceptance of using e-learning of Clerks of banks.

**H1**.Perceived Usefulness would affect positivelyacceptanceof using e-learning

Perceived usefulness is defined as the degree to which an individual believes that a particular system would enhance his or her job performance within an organizational context [9]. Information system researchers have asserted that PU is valid in predicting the individual's acceptance of various systems [10, 36, 3]. Previous studies revealed that PU positively affected the users' acceptance to use systems [13]. In the context of e-learning within organizations, PU refers to the extent to which employees believe that using e-learning systems will enhance their learning performance. We make an assumption that the more employees perceive usefulness in e-learning systems within the organization, the more positive their acceptance of e-learning systems will be, which consequently improves their learning experience and satisfaction and increases their chances for using e-learning systems in the future [14]. As such, PU would influence them to accept and adopt the e-learning systems.

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in: *Finance and Banking***

**H2**.compatibilitywould affect positivelyacceptance of using e-learning.

Compatibility is defined as the degree to which an innovation is perceived as being consistent with the existing values, needs, and past experiences of potential adopters. An idea that is incompatible with the values and norms of a social system will not be adopted as rapidly as an innovation that is compatible. The adoption of an incompatible innovation often requires the prior adoption of a new value system, which is a relatively slow process.

**H3**.voluntariness of usewould affect positivelyacceptance of using e-learning.
Voluntariness of use defined as the degree to which use of innovation is perceived as being voluntary [25]. Voluntariness was shown to be more than a binary variable. Many researches assume, based on respondents' level in the hierarchy or on job descriptions, that certain behaviors are either voluntary or compulsory.

**H4.**Visibility would affect positively acceptance of using e-learning

Visibility defines as the degree to which one can see others using the system in the organization. Visible results lower uncertaintyand also stimulate peer discussion of a new idea, as friends andneighbors of an adopter often request information about it.

**H5**.trustwould affect positively acceptance of using e-learning

Trust is an important indicator reflecting the quality of interpersonal social relationships. As a socialconstruct that originates from interpersonal relationships. Trust is one of the most desired qualities in anyclose relationship, as well as one that significantly influences users' acceptance to adopt technological artifacts when they are perceived as social actors [38].

**H6**.Perceived playfulness would affect positively acceptance of using e-learning.

Hedonic outcomes such as pleasure, enjoyment, playfulness, happiness are intrinsic motivators of system adoption [35]. Intrinsic motivation is considered to be a reward. Playfulness is a factor that reflects the user's intrinsic belief in WWW acceptance [23]. Another study also shows that perceived playfulness contributed significantly to the users' acceptance to use a web site [20].

**H7**.overload working would affect negatively acceptance of using e-learning.

Work related issues, including time resources and work overload could affect the acceptance and operation of e-Learning contribute to the formulation of contemporary psychological healthy working environments with respect to the balance between working and personal life [11]. Work overload have been proposed in the literature as issues affecting acceptance to use e-learning [2].

**H8**.educationallevel would affect positively acceptance of using e-learning

Based on previous research, the most important demographic characteristic which has been detected to explain e-learner behavior is education [37]. This characteristic also cumulates relatively well learners' abilities and needs to adopt new e-learning services.

Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)
Issue 9, 2013 , pp. 9-21

http://www.gjset.org

Special Issue in: *Finance and Banking*

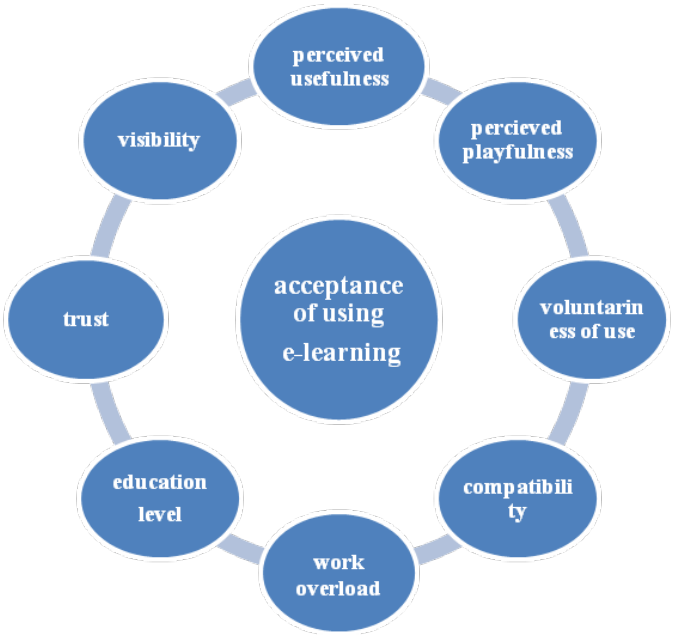


Fig.1. Proposed framework for assessing acceptance of using e-learning

## IV. Research methodology

### A. instrument construction

A questionnaire instrument was developed for this study. Individual scale items are listed in Appendix A. These scale items were developed based on the existing literature discussed in the previous sections. Our research model consists of eight variables: perceived usefulness, perceived playfulness, education level, trust, visibility, Compatibility, voluntariness of use and work overload.

We developed multi-item Likert scales which have been widely used in the questionnaire-based perception studies. All variables are subjectively measured using the five-point Likert Scale, with 5 being ‘‘Strongly Agree” and 1 being ‘‘Strongly Disagree.”

### B. Data collection

The survey was conducted in 4 banks: Melli, Mellat, Tejarat and Keshavarzi in Shiraz city during September of 2012. 385 Bank clerks who had attended at least one e-learning class participated in this study through an anonymous survey instrument. Asynchronous e-learning support includes online lecture notes, online quizzes, online announcements, online assignments, electronic student–student and student–instructor communication, audio and video streaming, and threaded discussions. The synchronous e-learning support includes chat and video conferencing. Table 2 summarizes the demographic profile of the survey participants who returned the valid responses.

Table2. Demographic profile and descriptive statistics of surveyed students

Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)
Issue 9, 2013 , pp. 9-21

http://www.gjset.org

Special Issue in: *Finance and Banking*

| Items | Frequency | % |
|---|---|---|
| **Gender** | | |
| **Male** | 198 | 51.4 |
| **Female** | 187 | 48.6 |
| **Age** | | |
| **>25** | 104 | 27.0 |
| **26-35** | 211 | 54.8 |
| **36-45** | 54 | 14.0 |
| **<46** | 16 | 4.2 |
| **Educational level** | | |
| **Diploma** | 50 | 13.0 |
| | 113 | 29.4 |
| **Bachelor** | 175 | 45.5 |
| **Master** | 37 | 9.6 |
| **Phd** | 10 | 2.6 |

## V.Data analyses

### A. Model validation

SPSS version 18.0 was used to analyze the collected data.Binominal test was used to evaluate indicators in level of meaningfulness 0.05. The result showed three items include: two items from voluntariness of use (VU2, VU3) and one item from visibility (V4) were not meaningful in level of meaningfulness 0.05. So these items were deleted (table 3).

ACronbach's a value that is greater than 0.7 indicates high reliability and a Cronbach's a value that is less than 0.35 represents unacceptable reliability [6]. A Cronbach's a value between 0.35 and 0.7 has fair but acceptable reliability.Thus, all constructs can be considered reliable. The reliability values of the constructs are in the range of 0.714–0.796 suggesting acceptable reliability (table 3).

### B. Hypotheses testing

Forward stepwise model was used for entering independent variables to regression model. Forward stepwise model involves starting with no variables in the model, testing the addition of each variable using a chosen model comparison criterion, adding the variable (if any) that improves the model the most, and repeating this process until none improves the model.Forward stepwise regression, starts by measuring the degree to which one independent variable usually the strongest predictor correlates to the dependent variable. According to this method two independent variables include: "overload working" and "voluntariness of use" were ignored due to lack of qualification.so hypotheses H7 and H3 didn't confirm. Other predictors are significant in explaining the relationships (table 4). Perceived usefulness ($\beta = 0.232$, $p < 0.05$), perceived playfulness ($\beta = 0.189$, $p < 0.05$), trust ($\beta = 0.154$, $p < 0.05$), compatibility ($\beta = 0.217$, $p < 0.05$), visibility ($\beta = 0.166$, $p < 0.05$) and education level ($\beta = 0.090$, $p < 0.05$), are positively related to accept using e-learning. Thus,hypotheses 1, 2, 4, 5, 6 and 8 are supported.

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in:** ***Finance and Banking***

Table3.Factor analysis and reliability

| Category | Independent variables | | | | | | | | | | | | | | Dependent variable | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Factors | PU | | T | | C | | V | | PP | | WO | | VU | | UE | |
| Results ofBinomial test for indicators | Pu1 | 0.73 | T1 | 0.65 | C1 | 0.94 | V1 | 0.60 | pp1 | 0.63 | WO1 | 0.77 | Vu1 | 0.72 | Ue1 | 0.90 |
| | Pu2 | 0.71 | T2 | 0.62 | C2 | 0.95 | V2 | 0.79 | Pp2 | 0.72 | WO2 | 0.62 | Vu2 | 0.38 | Ue2 | 0.71 |
| | Pu3 | 0.59 | T3 | 0.97 | C3 | 0.64 | V3 | 0.6 | Pp3 | 0.74 | WO3 | 0.67 | Vu3 | 0.39 | Ue3 | 0.74 |
| | Pu4 | 0.65 | T4 | 0.57 | C4 | | V4 | 0.27 | | | WO4 | 0.74 | Vu4 | 0.32 | | |
| | | | | | | | | | | | WO5 | 0.59 | | | | |
| Cronbachs'alpha | 0.796 | | 0.739 | | 0.742 | | 0.775 | | o.714 | | 0.723 | | 0.738 | | 0.780 | |

Table4. Test results

| Relationship between variables | | | B | t-value | p-value | Eigen value |
|---|---|---|---|---|---|---|
| Fixed amount | | | - | 2.680 | .008 | 5.620 |
| Perceived usefulness | → | Clerks acceptance to use e-learning | .232 | 5.053 | .000 | 0.94 |
| Compatibility | → | Clerks acceptance to use e-learning | .217 | 5.032 | .000 | 0.068 |
| Visibility | → | Clerks acceptance to use e-learning | .166 | 3.891 | .000 | 0.043 |
| Trust | → | Clerks acceptance to use e-learning | .154 | 3.301 | .001 | 0.020 |
| Perceived playfulness | → | Clerks acceptance to use e-learning | .189 | 4.062 | .000 | 0.036 |
| Educational level | → | Clerks acceptance to use e-learning | .090 | 2.428 | .016 | 0.16 |

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in: *Finance and Banking***

## VI.Discussion

In this empirical study, we analyzed learners' acceptance of e-learning services from bank Clerks perspectives in Shiraz city.

Among the variables under study, perceived usefulness is the greatest predictor of Clerks acceptance to use e-learning. The result shows that theeasier to use the Clerks feel e-learning is, the more useful they feel e-learning is. Perceived usefulness in turn has a positive effect on using e-learning. For Clerks to continue to use e-learning, e-learning should be designed and developed to deliver value tothem. The usefulness can be enhanced by providing enhanced e-learning services without increasing the complexity of the e-learningprocess.

Compatibility affects clerks acceptance to use e-learning. An e-learning service incompatibility with cultural values and beliefs, previous experiences and needscan block its adoption. One of the example of the cultural incompatibility some-times occur when an idea is designed for use in one culture but then spreads to a different culture, with different cultural values.so it is necessary for managers to make own e-learning services according their organizational culture.Additionally change agents must have a high degree of empathy and rapport with their clients in order to assess their needs accurately.

The visibility of an e-learning service, as perceived by bank Clerks, is positively related to its rate of acceptance. The results of some ideas are easily observed and communicated to others, whereas some innovations are difficult to observe or to describe to others. Advertisement for e-learning, establishing e-learning rooms and installing e-learning software on the Clerks' cell phone can help increase visibility.

Trust positively affects clerks acceptance to use e-learning. Trust is vital in many relationships. Lerner trust is increased by aspects of the interaction.Familiarity with e-learning services through advertisement, visiting site and Clerks interference when designing e-learning portal, increase trust.In fact, familiarity did not directly increase trust is that the increased understanding of how to apply the technology. The result of this understanding decreases uncertainty and increases trust.

Playfulness positively affects clerks acceptance to use e-learning. One of the recent trends in educational services is to improve the educational outcomes by incorporating amusement. For example, edutainment typically seeks to instruct its participants by embedding entertainment into lessons. Incorporation of playfulness into teaching materials presents the greatest challenge to instructors who do not have sufficient computer skills. Educational institutions need to provide adequate resources to instructors and need to train them to use a variety of educational tools innovatively. A variety of entertainment tools are easily available in the online game industry. Periodic survey and assessment of new entertainment tools for educational use seem worth conducting.

Educational level is the weakest predictor of Clerks acceptance to use e-learning.In spite of most Clerks have academic education but they believe education doesn't a great impact on acceptance to use e-learning.But anyway results don't reject our hypotheses. Finally the results show against our expectancy,voluntariness of use and work overloaddon't affect acceptance of use. This inconsistency in results may happen because of difference in society,

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in: *Finance and Banking***

organizational culture or using different information system.

Most of our findings support recent studies in the information systems acceptance domain conducted in various countries. As indicated by our findings, Perceived usefulness positively affects the acceptation to use e-learning [19, 28, 30]. E-learning's playfulness positively affects Clerks' acceptance to use e-learning [28]. Compatibility and visibility cause clerks motivate to use e-learning services [16]. Trust to new learning system and content and aren't monitored by others have a positive effect on acceptance to use e-learning [21]and finally educational level positively affects the acceptation to use e-learning[8].

## VII. Conclusions

New technologies are implemented in organizations with the hope that they can increase the productivity of their business processes and improve employeesparticipation and satisfaction. However, how to best gain user acceptance and system adoption remains an important issue in the initial stage of design and implementation.

In the globalized organizational environment, understanding and investigating the specific e-learning phenomena are of great importance. By investigating critical factors on e-learning adoption in Shiraz banks, our study attempts to reviewed the organizational, work-related and individual characteristics surrounding the training generally and e-Learning specifically.objective is to transform the Bank to a learning organization [32].

Even though a rigorous research procedure was used, there are some limitations that should be addressed in future studies.The results of this study should be interpreted with some caution due to the lack of random selection from the population. Our findings and implications were inferred from a very limited set of banks in Shiraz city that use different e-learning systems. Thus, one should carefully interpret the results when generalizing the findings and extending the discussion to other organizations. Additionally, users' acceptance behavior could be influenced by use of different e-learning systems. Future studies could measure users' acceptance behavior with regard to using a specific e-learning system. With a more controllable environment, researchers can also manipulate some moderating factors (e.g., gender, age, working experiences, job positions, and organizational culture) that were not examined in this study to verify whether or not these factors are significant in influencing employees' e-learning adoption behavior.

**Appendix A**

Instrument: All items were measured on a five-point Likert scale.

| ITEMS | MEASURES |
|---|---|
| **compatibility** | |
| **C1** | **Using an e-learning service is compatible with all aspects of my work.** |
| **C2** | **I think that using an e-learning service fits well with the way I like to work.** |
| **C3** | **Using an e-learning service fits into my work style.** |
| **Visibility** | |
| **V1** | **I would have no difficulty telling others about the results of using an e-learning service.** |
| **V2** | **I believe I could communicate to others the consequences of using an e-learning service** |

Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)
Issue 9, 2013 , pp. 9-21

http://www.gjset.org

Special Issue in: *Finance and Banking*

| | |
|---|---|
| V3 | The results of using an e-learning service are apparent to me. |
| V4 | I would have difficulty explaining why using an e-learning service may or may not be beneficial |
| Work Overload | |
| Wo1 | I don't like to use e-learning services because I am over loaded by my duties. |
| Wo2 | I believe that using e-learning services are affected by work load |
| Wo3 | I don't have enough time in office to use an e-learning service. |
| Wo4 | If I use an e-learning service, I can't able to do my duties completely. |
| Wo5 | In my opinion using e-learning services needs more time the other learning methods. |
| Perceived playfulness | |
| Pp1 | I feel e-learning is fun regardless of usage purposes |
| Pp2 | I feel e-learning helps me improve my imagination by obtaining information |
| Pp3 | I feel I can have a variety of experiences without any interference |
| Perceived usefulness | |
| Pu | E-learning improves my learning outcomes |
| Pu | E-learning is very useful to me |
| Pu | E-learning helps me accomplish my learning effectively |
| Pu | E-learning is easier than other learning methods for me. |
| Voluntariness of use | |
| Vu | My manager expects me to use e-learning services. |
| Vu | Using e-learning services is voluntary in our organization and it isn't forced by our supervisor. |
| Vu | If using e-learning services is voluntary I have more tendency to use those. |
| Vu | Although it might be helpful, using a PWS is certainly not compulsory in my job. |
| trust | |
| T | I believe that having trust to e-learning services cause to use those. |
| T | I am trusted to e-learning services. |
| T | If I am monitored by others in e-learning portal, don't le to use that. |
| Clerks; acceptance of using e-learning | |
| | I am completely ready to use e-learning services. |
| | I am able to use computer |
| | I have passed the needed e-learning courses to use e-learning services. |
| Educational level | It is asked in demographic question |

**Global Journal of Science, Engineering and Technology (ISSN : 2322-2441)**
**Issue 9, 2013 , pp. 9-21**

http://www.gjset.org

**Special Issue in:** ***Finance and Banking***

**References**

[1]. Agarwal, R., and Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. Information Systems Research, Vol.9, No.2, pp. 204-214.

[2]. Ahuja, M.K., Chudoba, K.M., Kacmar, C.J., McKnight, D.H., and George, J.F. (2007). IT road warriors: balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions. MIS Quarterly, Vol. 31, No. 1, pp. 1-17.

[3]. C.L. Hsu, H.P. Lu, Why do people play on-line games? An extended TAM with social influences and flow experience, Information and Management 41 (7( (2004) 853–868.

[4]. Csikszentimihalyi, M. (1975). Beyond boredom and anxiety. San Francisco, CA: Jossey-Bass.

[5]. Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper and Row.

[6]. Cuieford, J. P. (1965). Fundamental statistics in psychology and education (4th ed.). New York: McGraw Hill.

[7]. Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology.MIS quarterly, Vol. 13, No. 3, pp. 318-339.

[8]. Dahlberg T. and A. Öörni, (2007),'Understanding Changes in Consumer Payment Habits-Do Mobile.

[9]. F.D. Davis, R.P. Bagozzi, P.R. Warshaw, User acceptance of computer technology: a comparison of two theoretical model, Management Science 35 (8) (1989) 982–1003.

[10]. F.D. Davis, Perceived usefulness, perceived ease of use and user acceptance of information technology, MIS Quarterly 13 (3) (1989) 319–340.

[11]. Gilbreath, B. (2008). Creating career-conducive organizations: a primary intervention approach, Advances in Developing Human Resources, Vol. 10, No. 1, pp. 8-31.

[12]. http://www.gartner.com/it/products/research/industries/industries.jsp#bank

[13]. J.H. Marler, J.H. Dulebohn, A model of employee self-service technology acceptance, Research in Personnel and Human Resources Management 24 (2005) 137–180.

[14]. K.A. Pituch, Y.K. Lee, The influence of system characteristics on e-learning use, Computers& Education 47 (2006) 222–244.

[15]. Kalika, M. Le management est mort, vive le e-management // Revue Française de Gestion, 2000. - № 129, pp. 68-79.

[16].kohan,parvin

[17]. Lee, M. K. O., Cheung, C. M. K., & Chen, Z. (2005). Acceptance of Internet-based learning medium: The role of extrinsic and intrinsic motivation. Information and Management, 42(8), 1095–1104..

[18]. Lian, J.-W., and Lin, T.-M. (2008). Effects of consumer characteristics on their acceptance of online shopping: comparisons among different product types, Computers in Human Behavior, Vol. 24, pp.48-65.

[19]. Liaw, S. S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system. Computers and Education, 51(2), 864–873.Liaw, S. S., Huang, H. M., & Chen,

[20]. Lin, C. S., Wu, S., & Tsai, R. J. (2005). Integrating perceived playfulness into expectation-confirmation model for web portal context. Information and Management, 42(5,( 683–693.

[21]. Lingyun, Li Dong, (2008), Applying TAM in B2C E-Commerce Research An Extended Model, TSINGHUA SCIENCE AND TECHNOLOGY, ISSN 1007-0214 02/26 pp265-272 , Volume 13, Number 3, June 2008.

[22]. Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. Information Systems Research, Vol. 2, No. 3, pp. 173-191.

[23]. Moon, J., & Kim, Y. (2001). Extending the TAM for a World-Wide-Web context. Information and Management, 38(4), 217–230.

[24]. Moore, J.E. (2000). One road to turnover: an examination of work exhaustion in technology professionals. MIS Quarterly, Vol. 24, No. 1, pp. 141-168.

[25]. Moore, j.e. - Benbasat, I. (1991) Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research* Vol. 2, No: 192-222.

[26]. Neirotti, P., and Paolucci, E. (2005).The transformation of work in European banks: an analysis of IT skills, International Journal of Information Technology and Management, Vol.4, No.2, pp.197-213.

[27]. Pavlou, P.A., and Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: an extension of the theory of planned behavior. MIS Quarterly, Vol. 30, No. 1, pp. 115-143.

[28]. Roca, J. C., &Gagné, M. (2008). Understanding e-learning continuance intention in the workplace.A self-determination theory perspective. Computers in Human Behavior, 24(4), 1585–1604.

[29].Rogers, E.M., 'The Diffusion of innovation', third edition, Free Press, New York.

[30]. Sánchez-Franco, M. J., Martínez-López, F. J., & Martín-Velicia, F. A. (2009). Exploring the impact of individualism and uncertainty avoidance in Web-based electronic learning: An empirical analysis in European higher education. Computers and Education, 52(3), 588–598.

[31]. Selim, H. M. (2003). An empirical investigation of student acceptance of course websites. Computers and Education, 40(4), 343–360.

[32].Senge, P. (2006). The fifth discipline: the art and practice of the learning organization. Currency.

[33]. Urdan, T. A., Weggen, C. C. (2000). Corporate e-Learning: exploring a new frontier. San Francisco: W.R. Hambrecht & Co.

[34]. Venkatesh, V., and Davis, F.D. (2000). A theoretical extension of the technology acceptance model: four longitudinal field studies, Management Science, Vol. 46, No. 2, pp. 186-204..

[35]. Venkatesh, V., & Brown, S. A. (2001). A longitudinal investigation of personal computers in homes: Adoption determinants and emerging challenges. MIS Quarterly, 25(1), 71–102.

[36]. V. Venkatesh, Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model, Information Systems Research 11 (4) (2000) 342–365.

[37]. Venkatesh, V., Morris, M. G., Davis, G. B., Davis, F. D. (2003) User acceptance of information technology: toward a unified view, *MIS Quarterly*, 27(3), pp. 425-478

.[38] Wang W, Benbasat I. Trust in and adoption of online recommendation agents. Journal of the Association for Information Systems, 2005, 6(3): 72-101