Studying experiences of using financial management technologies in the active companies in terms of technology acceptance model technology (TAM)

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Abstract

The aim of this study is to investigate experiences of using financial management technologies in active companies in terms and model of accepting the technology (TAM). The way of survey was descriptive – analytic. Statistical society of the research was all of the directors of active companies in the industrial estates of Ahwaz. In this research 70 active company in the industrial estates of Ahwaz from 79 companies were selected through classification sampling and research samples selected from financial managers of the companies. Tool of collecting data was standard questionnaire model of accepting technology TAM which includes 5 components and 23 questions. Validity of the present research questionnaire was confirmed with showing partial views of 10 experts and specialists of this field and direction of research being permanent was used through calculating alpha Chronbach coefficient that was equal to 90% in order to analyzing data descriptive statistic indices were used at a meaningful level $\alpha = 0.05$. Results of the research show that increasing use of components of financial management technologies, is accompanied with increasing attention to use, behavioral tendency to use and increasing practical usage. And according to conducted investigations in this regard some suggestions were offered in order to more effectively use of this technology in companies.

Keywords: financial management, information technology, technology acceptance model,

1. introduction

present era has some characteristics that distinguish it from post time. Some of these character is tics are rapid and new changes that affected all aspects of human life. Various dimensions of human life in present age are integrated surprisingly with each other and consequence of this integration in a specific and different condition of various systems (Gudarzi, 2006).
Long distance of our country with advanced countries in the context of creating technology has caused us to operate as importer of the technology and we repeatedly witness entering new technologies. In many cases we witness that these technologies are not used appropriately and after short time usage will be completely put away due to inappropriate usage. Clear example of this problem in entering advanced computers to organizations that are used just economically non-justifiably because staffs don’t accept them and they insist using hand systems. While if entrance of the technology to organization is accepted by staffs, leads to more effective usage (Mohaghar and Shirmohammadi, 2004).

Today organizations use various information and methods in doing their directional responsibilities and optimal use of the sources. One the most important tools is financial management information that it's function is meeting director's informational needs in different levels in fields of programming and controlling resources, estimating function and decision making. So using advanced technology in all contexts including in informational systems, the need to have an appropriate information in order to programming and short time and long time decision making has a special importance (Nasirzadeh, 2003). The discussion of using new technology in the country is seriously introduced and state and non–state organizations and institutions with an accelerated movement have placed using this technology in their programs. The government also in the form of TAKAFA (developing and using information technology) has obligated it's organizations and institutions to give formalized programs in order to employing communicational and informational technologies. The importance of accepting information technology is determined more than before and this case must be considered in codifying infrastructure guidelines of this technology. User acceptance of technology in two recent decades has an important field studies (Gafari et al., 2011).

Although most of the models introduce description and prediction of a system application, technology acceptance model is the only model that direct more attention to informational systems. Hence, recognizing technology acceptance model for studying user acceptance of technology is an urgent need (Davis, 1985), and in a method that could meet directional needs dong with new transformations in context of short–term and long–term programming. So, research hypothesis are introduced as:

**The main hypothesis**

There's a relationship between components of using financial management technologies in active companies in the industrial estates.

**The sub-hypothesis**

- There's relationship between compatibility and theory of using financial management technologies.
- There's a relationship between using easily and theory of using financial management technologies.
- There's relationship between attitude toward usage and behavioral tendency to use financial management technologies.
• There's relationship between being beneficial and behavioral tendency to use financial management technologies.

• There's relationship between easily usage and behavioral tendency to use financial management technologies.

• There's relationship between behavioral tendency and practical usage of financial management technologies.

2. Literature Review

1-2 Information and communication technology and development index

At the end of second millennium and start third anno domini millennium, integration of technology and information systems in routine human life is observed continuosly and more accelerated than before. Since in this evolution, the information is life of the organization, this critical questions remains that what should be the place and situations of various organizational dimensions in accordance with maximum optimal use of technology and information systems and reaching to organizational success (Khodadad Hosseini and Mobaraki, 2002).

Informational technology and informational systems which are used as IT/IS in this paper, with creating precise, rapid, and widespread communication have caused new environmental threats and opportunities for organizations which were not imaginable before an environment that according to Browning's belief (1990) IT/IS we not known as a tool or a production resource anymore, but they are environments governing work and production (Malhotra, 1993).

According to clear sights in such way that invention of steam engine and industrial revolution have caused great transitions in individuals personal and work life and basically it's believed that management science is driven from that periods – communication revolution also similarly make transitions in human life (Lorin et al., 1997). Frequently employing this assimilation contains this message that based on experience of industrial revolution, every group or nation who know environmental conditions better and adapted himself more rapidly to it, has took essential steps in developing itself.

These editions rapidly change those mental images that a human has about trade and work and like rapidly change of information systems, guidelines of work and trade also change (Ryes, 2000). in this situation all managers encounter with an essential need and an important question that is how they could distinguish difference of effectiveness (doing works properly) from impressions (doing accurate works) in employing IT/IS. Because decentralization process in powers and at the same time increasing subsidies and software series of Ria has created an efficiency archipelago in each organization in which every part or director of every part lonely and separated from the others, improves the trend of efficiency. Although it's believed that all are accurate works, but with loss of an effective pattern for optimal employing IT/IS it's hard to argue that all works are done accurately (Keen, 1991).
One of the characteristics of information and communication technologies which is observable in all user affairs is it's rate of developing. This speed is due to a relatively appropriate communicational bed which today is expanded all over the world. Using information and communication technologies as a developmental tool is lionized by it's user. Diuis (1993) suggested that contrary to what he had expected first, observed effectiveness also can has a direct affection using real system. at the first year, he concluded that characteristics of the system can directly effect one's attitude toward using the system with out any need to any forms his/her actual belief about system as shown in figure 1 (Davis, 1993; Davis, 1989).

Hosseini and Mobarak (2002) in their research and with analyzing clear sights beliefs about position and optimal situation of organizational dimensions which guarantee impressments of systems and information technologies in organizations have designed a conceptual model and conducted a field study among some dependant companies (n = 58) on an economical group in order to measuring efficiency and specifying it in current situations findings of the research showed that there's a meaning full difference in various organizational dimensions among successful companies which use systems and information technologies at a high level and companies that benefit from this situation at a low level. Nasirzadeh (2003) in his research suggests with pointing to state-owned companies using of financial technologies such as comparison financial statements, universtigating analytic process of financial proportions, fund recovery method increasing fund and law and not using methods like homogeneous financial statements, reverse fund recovery period, internal efficiency rate, accounting efficiency rate pure present value, analyzing polities, tiding pattern and methods of financial supply. Through issuing participation and sleeping partnership with other companies, he says what nonuse of this technologies make needed bed for employing aforementioned methods. Azadmanesh (2005) conducted a research with this topic investigating feasibility study of employing new information and communication technology ICT in curriculum of higher education from the faculty's viewpoint of Shahid Beheshti University, KT expertise and curriculum expertise and has dealt with investigating possibility of using gifts of this technology in the field of higher education curriculum. Obtained rests suggest that provided answers are coordinated and there's no meaningful difference between their views. The results show that most apposed theories of repliers confirmed that new possibilities of information technology are usable in curriculum of higher education and repliers believe that in spite of urgency of information technology facilities in curriculum of higher education including design, performance and appraisal there's not still sufficient facilities available for improved individuals in these processes repliers also believe in existing facilitator factors such as professors, insufficient facilities in universities and colleges and inaccessibility and student's tendency to exploiting new facilities and also existence of obstacles like professors little familiarity with technology environment, lack of site and appropriate facilities in colleges and student's inaccessibility to ICT facilities in university are know as dossals of accepting this technology un this system. Shoae and Alavi (2007) have investigated effective factors on accepting information technology by librarians of technical colleges of Tehran state – universities in the form of technology acceptance model elements of this model in the present study are intrinsic understanding of utility, intrinsic understanding of easily usage, attitude, toward usage and making decision to use this technology, these elements are independent variables that effects dependent variable
of information technology. Statistical society consisted of 160 librarians. The results obtained from research showed that factors of technology acceptance model in this research also are know as effective factors on information technology acceptance in the form of a model. Doran and Rashidi (2007) have studied effective factors on information technology acceptance by teachers of intelligent schools in Tohtan and they emphasized on information technology acceptance model. Obtained results suggest that intrinsic understanding variable of easily usage of information technology has a meaningful effect on intrinsic understanding variable of attitude reward information technology and intrinsic understanding of utility variable intrinsic understanding variable of utility of information technology has a meaningful effect on variable of using information technology use making decision to information technology variable has a meaningful effect on using information technology. Khalil Moghadam's et al (2008) studies results showed that there's a positive relationship at 1% level between the amount of accepting ICT technology and independent variables include age, education, sex, marital status, life style, original job, and the level of user's computer skills, the member of family members who are familiar with computer, number of administrative members of family, user's older sister's education, the amount of family's motivation about using ICT in order to work and proration from far away, ICT complexity, mental image of ICT, being observable of ICT advantages, and the amount of using written media by family.

Bagheri et al (2009) studied Internet banking acceptance in Iran with expanding technology acceptance model. In this research with investigating the most important offered models in content of individual technology acceptance two factors i.e. intrinsic understanding of personal ability and trust in technology acceptance model were added. Roshandel Arbatani et al (2009) suggested in a research which it's name in evaluating electronic readiness of medium small companies in order to enter electronic trade arena in Shiraz large industrial estates, that in informational community, companies requires to develop competitive advantages based accurate and centralized usage of information and communication technology which is a key element for success in today market. The resells of this research have specified readiness of aforementioned companies in area of production in some dimensions technical – communicational infrastructure, information technology security and legal environment and suggest that these companies don’t know sufficient readiness in other aspects except in informational readiness and management and organizational policy. Khosravi nejad and Assare (2011) with investigating technological barriers of internationalizing curriculums of Azad universities in 6th region (Khuzestan) from viewpoint of the faculties members of these universities concluded that employing information and communication technology has an important and strategic role in progress of all educational, structural, human and directional – political aspects and cause these programs be convergent with modern universal evolutions. Khosravi nejad et al (2013) in a research namely investigating effective factors in using educational technologies based on technology acceptance model (TAM) in addition to emphasize on role of multiple and creative thinking in this process obtained many useful results. The results of research statistically suggest that from accounting field of Azad university of shush student's viewpoint increasing usage of components of educational technology has accompanied increasing attitudes toward usage, behavioral tendency to use, and increase in practical usage. Schiper and Vetzels (2007) dealt with technology acceptance model. They used pervious literature about technology acceptance model, in this quantitative analysis. They
tried to obtain appropriate results (findings) about role of individual norm and adjustment effects. Their results indicated meaningful effect of individual form on usefulness and behavioral tendency to accept technology.

Johnson (2009) investigated effecting factors on new directional technology in financial organizations. The results of his study showed that usefulness and easily usage are determinative factors in technology acceptance. He also found that personal innovations directly and non–directly has an effect on employing new technology through facilitating usage. Chuttur (2009) points in a study named a description on technology acceptance model: resource, evolution and future guidelines that first researchers in spite of very much usage of this model, have different opinions about its theoretical assumptions and secondly this model don't have sufficient communication which has to be considered by researchers. Khosravi nejad and Assare (2012) dealt with studying role of information and communication technology (ICT) on students knowledge, attitude and dexterity abilities in teacher education universities of Dezful and results of research suggest that from students point view in teacher education universities, ICT play an important role increasing student's scientific, theoretical and dexterity abilities. Popescu et al (2012) in his research celled Science and managing it: new challenges and outlooks with pointing to expansively of science in age of information and communication technology, has pointed to encourage tendency and motivation in addition to developing individuals knowledge and skills. They believe that one method of managing science and knowledge in this age is to use technology. Khosravi nejad et al (2013) in their research called investigating application of information and communication technology (ICT) in instructing – learning process of khorasegan Islamic Azad university with pointing to advantages and disadvantages of using information and communication technology (ICT) emphasized on outfitting, admeasurements of budget instructing teachers and learners in using this technology, recognizing obstacles of using this technology at university and creating a positive attitude in teachers and learners toward using this technology.

3. Method of research

Research method was descriptive. Statistical society consisted of all directors of active companies in the industrial estates of Ahwaz. From 97 active companies in the industrial estates of Ahwaz, 70 companies were selected by classification sampling data collecting tool was standard questionnaire of Technology acceptance model (TAM) which included 5 components and 23 questions. Validity of questionnaire of present research confirmed by expertise showing partial views of this field and steadiness direction of questionnaire is used through calculating Chronbach Alpha equal to 90% in order to analyzing data descriptive statistics indices were used at a meaningful level $\alpha = 0.05$.

4. Analyzing findings of the research

Descriptive findings of this research include statistical indexes such as the average, standard deviation, number of sample variables and frequency table and percentage which are given for all variables of this research.

Table 1: frequency distribution and percentage of easily usage variable of financial management technologies.
As observed in the above table (table 1). Easily using financial management technologies has dedicated to itself a high level of the most frequency (45 people). About 63/4% and easily using of financial management technologies in lowest level of frequency (5 peoples) about 7%.

Table 2: frequency distribution and percentage of usefulness of employing financial management technologies.

As observed in the above table (table 2) usefulness of employing financial management technologies has dedicated to itself the most percentage of frequency (58 people) about 81/7% in a high level, and minimum frequency (2 people) about 2/8 percent.

Table 3: frequency distribution and percentage of attitude toward using financial management technologies:

As observed in the above table (table 3) attitude toward using financial management technologies has dedicated to itself the most frequency (43 people) at a high level about 60/6%, attitude toward using financial management technologies has dedicated to itself minimum frequency (0 people) at a very low level about % percent.

Table 4: frequency distribution and percentage of behavioral tendency to use financial management technologies.

As observed in the above table (table 4) behavioral tendency to use financial management technologies has dedicated to itself the most frequency (60 people) at a high level about 84/5%, behavioral tendency to use financial management technology has dedicated to itself minimum frequency (0 people) at a low level about % percent of the sample.

Table 5: Frequency distribution and percentage of practical usage of financial management technologies: as observed in the above table. Practical usage of financial management technologies has dedicated to itself the most frequency of the sample (34 people) at a high level about 47/9% and minimum frequency of the sample (16 people) at a very low level about 22/5%.

Table 6: Central indexes and scattering of scores of effective factors on accepting financial management technologies in active companies of Ahwaz industrial estates using technology acceptance model (TAM)

As observed in the table 6, the average and standard deviation of easiness of usage component in financial management technologies in active companies of Ahwaz industrial estates is (3/99 and 0/65) and with attention to this fact that obtained mean is higher than mean of questionnaire and this indicates that the amount of easily usage of financial technologies is high in Ahwaz industrial estates using technology acceptance model (TAM). Mean and standard deviation of score of usefulness component in financial management technologies in active companies of Ahwaz industrial estates is (4/33 and 0/53) respectively and indicates that the amount of utility using financial management technologies is high in active companies of Ahwaz industrial estates using technology acceptance model (TAM). The mean and standard deviation of attitude toward using financial management technologies in active companies of Ahwaz industrial estates
are (4/04 and 0/56) respectively and indicates that amount of attitude toward using financial management technologies if high in outline companies of Ahwaz industrial estates using technology acceptance model (TAM). The mean and standard deviation of behavioral tendency to use financial management technologies in active companies of Ahwaz industrial estates are (4/14 and 0/51) respectively and indicates that amount of behavioral tendency to use financial management technology in active companies of Ahwaz industrial estates is high with using technology acceptance model (TAM). The mean and standard deviation of practical usage are (3/37 and 0/83) respectively and indicates that amount of practical usage of financial management technologies is high in active companies of Ahwaz industrial estates with using technology acceptance model (TAM).

5: conclusion

One of the important necessities performing expansion programs in organizations and companies is to analysis and encourage internal coherence of these systems obtained results of this research help us reach a good understanding of situation various elements of information technology and attention to one aspect of main try in information technology programming and attention to effective factors on accepting and using information technology. is essential a positive relationship with correlation coefficient between understandings, tendency, usage theory and tendency to use information technology suggest that amount of usage and the way of usage have a strong and high relationship with understandings that form amount of their tendency. Strong and positive relationship of tendency to use and perceived usefulness means that creating an agreeable organizational atmosphere in employing information technology system is one of the necessities of all activities in organization in context of information technology. people's individual efficiency related to computer systems always in all researches and in present research shows a direct relationship with easiness of usage. This means that it must be tried to reduce encouraging people who don't have any experience in working with computer systems also, with creating appropriate organizational atmosphere and doing actions like employing appropriate educational methods we can take steps in reducing this anxiety and increasing individual efficiency with attention to this fact that according to results of research understanding of easiness of usage affect understanding of usefulness one can argue that the more feel comfortable in using this system, the more useful the system is in doing works in general one can say that in order to including activities in information technology acceptance in guideline programming and operational programming the status of companies must be considered precisely to identify how much is the effect of each element which based on that one can take necessary steps.

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