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Examine the Effect of Social Factors on Information Technology Acceptance in Accounting Profession by Using TAM Model

Akbar Allahyari^α, Farhad Garabaghi^σ & Morteza Ramazani ^ρ

Abstract - Nowadays, Information technology (IT) is considered as a very important and most useful part of industry, economic and culture, accounting is the system of recording and summarizing business which provide the users with information in their decision making process this research tries to examine the effect of social factors on IT acceptance to by using TAM model. The research method is descriptive-survey based on which the author used descriptive and deductive statistic to meet the research goals. The results indicate the lack of perceived ease of use among ease accountants.

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I. Introduction

hat factors make a person to admit new technology in his profession? Are these factors merely dependant on technology specially and its factors? To how extent persons' factores affect this fission? How do these factors affect the process of technology acceptance?

Considering the rapid expansion of using computer in the organizations, IT has developed its dominion over all aspects of our life. Virtually each organization empheizes on greater importance of computer science and skills. Computer has absolute domination over some fields as education, commerce, hubbies and our daily life. For example, computer, internet, multimedia and computer nets utilized in education and educational institutes have employed technological tools to improve the quality of their performance and directions in general, organizations use IT to enhance efficiency, effectiveness and improvement of quality in their performance because the believe that the informational technology can provide organizations with valuable opportunities to enhance efficiency and performance (awm and Quinet, 2002). It is necessary to state that organizations have not always equal opportunities to benefit from technology because they don't use IT systems in effective way. Bradly and Rashel believe that organizations use their financial resources to purchase and establish computer systems and fry to improve their performance but they are not always successful in their operations. When there is a resistance against using technology it is difficult to point oriented goals than organizations will lose their money, time and other resources (Nuan, 2001). In this research we try to examine the effect of social factors on IT acceptance Iranian accountants by following written assays in this field among (Hyo-Jeong Kim, Michael Mannino and Robert J. Nieschwietz, 2009). In this research, social factors have been classified into three groups as research main variables Internalization and Image.

II. THEORETICAL BACKGROUND

a) Technology Acceptance Model

Technology Acceptance Model (TAM) is most influential model of testing information system. TAM posits that perceived usefulness and perceived ease of use technology (Davis et al.1989; Venkatesh and Morris 2000; Venkatesh, Morris and Davis 2003) determine an individual's intention to use a system with intention to use serving as a mediator of actual system use. TAM model is shown in Figure.1 Perceived usefulness is also seen as being directly impacted by perceived ease of use. Perceived usefulness is the extent to individual believes that using an information system will enhance his/her productivity. Perceived ease of use technology is extending to individual perceived that using an information system is free of effort (Davis et al. 1989). Moon and Kim (2001) stated perceived playfulness is the extent to an individual perceives attentions which are related on the interaction within information system.

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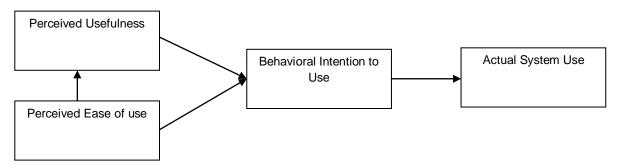


Fig. 1: Technology Acceptance Model

b) The Use of ICT in Accounting Education

In the past years several researchers have studied the application of technology in the accounting classroom (Apostolou et al, 2001, Watson et al, 2003). Halibi et al (2002) surveyed introductory accounting trainees to determine trainee attitudes towards teleteaching versus traditional in-class lectures. They found that most trainees preferred the traditional face-to-face approach of teaching. Moreover, Lane and Porch (2002) studied the impact of computer aided learning on performance of accounting undergraduates in the UK and found that computer-aided learning technology has negatively affected the trainees' perception of accounting as a subject. Peterson and Reider (2002) reported that trainees had an overall positive experience for the use of computers in certification in financial management. Crandall and Philips (2002) found that hypertext learning could be used in accounting classes to enhance case based instruction. Rudolph et al (2002) found that only 17% of the trainees would take another interactive television course when examining the impact of interactive television on learning. Mahoney and Welch (2002) reported that 96% of their accounting trainees sample indicated that the use of PC movies was very beneficial. These findings indicate that there is a variety of reactions towards the use of advanced and different information and communication technologies teaching in general and in specific disciplines in particular.

The sample of accounting trainees studied by McCourt and Radcliff (2000) reported that computer based instruction made the material more interesting and stimulating from trainees in the UK. Moreover, Green, Reinstein, and McWilliams (2000) found that trainees' interest in accounting increased in the interactive courseware group when compared with the traditional lecture problem solving group and that trainees generally found the interactive courseware to be easy to use and as effective as the traditional methods. Most of the research was conducted in developed nations. No present evidence indicates that such research and results can be applied to developing nations, especially with the varying environments and the role of different cultures that affects the introduction, diffusion and use of information and communication

technology. The Technology Acceptance Model-TAM (Davis, 1989) is suitable for testing the application of IT in accounting education in developing nations since it has shown robustness across the spectrum of IT applications, has been well researched, and gives easily interpretable results (Rose and Straub, 1998). In other terms, TAM has been reported to be a consistently good predictor of the use of IT in developed countries (Kamel and Assem, 2003, Rose and Straub 1998, Adams et al, 1992, Davis, 1989 and 1985).

Loch, Straub and Sevcik (2000) offer two main reasons why the transfer of IT to developing nations is difficult and that relate to a) the cultural differences affecting systems development and implementation and b) the prevailing government policies and regulations that influence IT transfer. Within the context of testing the effectiveness and reliability of using information and communication technology in teaching accounting, it is important to assess the role of culture in the technology transfer in light of the arguments made by Loch et al (2000). The impact of the role of culture represents a milestone in the successful diffusion of IT since it varies from one nation to another and is bound to a number of complex definitions and shared values amonast other aspects (Straub et al, 2002). It is important to note that research has proved in many contexts that culture impacts the acceptance of technology. Respectively, it is important to understand the impacts and role of culture to be able to project the likelihood of the success of the introduction of IT (Loch el al, 2000). However, the role of culture is more or less localized and that is why it is important to study the role of culture within the environment of implementation because although the role of culture is powerful, cross cultural conflicts between different nations affects the IT systems and processes (Straub e al. 2001).

III. RESEARCH OBJECTIVES

This research tries to examine the effect of social variables on IT acceptance among Iranian accountants. Determine the affect of social factors makes firms' managers to provide reliable and on-time information for correct decision making by investing on employees' facilities and education.

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- . Therefore this research insists on following objectives:
- 2. Determine the extent of social factors affection technology acceptance.
- 3. Provide suitable frameworks to help the acceptance of technology among accountants.
- Discern perceived usefulness and perceived Ease use of technology to help T- acceptance among accountants.

IV. RESEARCH HYPOTHESIS

- 1. Perceived usefulness has positive effect on IT acceptance among Iranian accountants.
- Perceived Ease of use has positive effect on IT acceptance among Iranian accountants.

- Perceived Ease of use has positive effect on perceived usefulness.
- 4. Social factors have positive effect on perceived usefulness among Iranian accountants.
- 5. Social factors have positive effect on perceived Ease of use among Iranian accountants.

V. Research Model

This research model on the basis of TAM model and on the base of research that Mrs (Hypo- Jeong Kim, Michael Mannino and Robert, Mieschwietz, 2009) have performance about IT acceptance in the internal audit profession in American 2009 has been figure.2 following from:

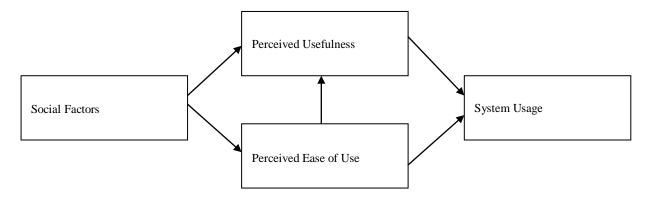


Fig.2: The model of research

a) Conceptual Definition of Social Factors

Social Factors	Definition of Factors				
Internalization	"When an individual accepts influence because the content of the induce behavior the ideas and actions of which it is composed is intrinsically rewarding." (Kelman, 1958, 53).				
Image	"The degree to which use of an innovation is perceived to enhance one's status in one's social system (Moore and Benbasat, 1991, 195).				

Social factors are also considered as external variables. Thompson et al. (1991) were interested in social factors which had a strong influence on PC utilization. Malhotra and Galletta (1999) tried to understand the role of social influences in the TAM and found that identification and internalization had a strong positive relationship with attitude toward using while compliance had a weaker negative relationship with attitude toward using. Subjective norm is influenced by both peer and superior (Mathieson, 1991; Taylor and Todd, 1995). The effect of subjective norm on technology acceptance had conflicting results. Davis et al. (1989) reported no significant relationship between social norms and usage because of the weak psychometric properties of their social norms scale and

particular IS context. Mathieson (1991) found no significant effect of subjective norm on intention while Taylor and Todd (1995) found a significant effect on intention. Venkatesh and Morris (2000) showed that subjective norm had a strong influence on technology usage decisions; however the effect of subjective norm was diminished over time. Through the TAM2, Venkatesh and Davis (2000) explained a large impact of social influence process (subjective voluntariness, and image) on technology acceptance. Social influence process significantly affects the technology acceptance through perceived usefulness (Venkatesh and Davis, 2000). Subjective norms are positively related to intention and moderated by experience and voluntariness, and also negatively associated with perceived usefulness and moderated by experience. Subjective norms positively influence image and image positively affects perceived usefulness. Through the UTAUT model, Venkatesh et al. (2003) confirmed that social influence was a direct determinant of intention to use.

VI. RESEARCH METHODOLOGY

In this study, research methodology is descriptive-survey and in applied kind. In the direction of entrance to research district have also used field



method. In the direction of gathering required information in research has been also driven profit two data primary and secondary bunches that in direction of secondary data, documents, evidences, books, articles, internet, searching motors and connected sites are collected circles. Techniques of interview and questionnaire have also used for gathering primary research data at statistical society simultaneously and questionnaire has used by likert five choices spectrums perfectly agree or disagree.

Statistical population uses these study active accountants in profession that use IT whether in case or continuously.

In process of data use method of descriptive and decomposing and analyzing statistic and interpreting information inferential statistics methods in respect testing present variables in research, correlation of independent variables on each other has been used Pearson correlation coefficient method.

VII. Result and Analyze

a) Research Validity and Reliability

With regard to the fact that a good test must has some desirable features such as objectivity, executive ease of use, practicable, is of interpretation and expression, validity and reliability. The most important mentioned cases in this features is validity and reliability. Researcher for research reliability has used Cranach's Alpha method that according to table No.1 counted Cranach's Alpha value by SPSS software is equal 0.828 bigger than 0.7. Thus test has acceptable reliability and answers have suitable validity and for validity of test 10 used questionnaires again to the reader and uniting result of opinions is chronological

period at one week has shown that indicate suitable validity of questionnaires.

Table No.1, Reliability Statistics			
N of Items	Cranach's Alpha		
22	.828		

b) Testing Research Hypothesizes

Table No.2, Frequencies of Social Factors				
Social Factors	N	Mean	St. Deviation	
Internalization	145	2.5655	0.66472	
Image	145	2.4448	0.76856	

With regard to the results of Pearson correlation test, research hypothesizes result is described in table No.2

First Hypothesis: With regard to Pearson Correlation 0.368 and P-value = 0.00 hypothesis in the level of error 0.01 is accepted then could resulted that perceived usefulness has positive impact on technology acceptance by accountant.

Second Hypothesis: With regard to Pearson Correlation -0.160 and P-value = 0.054 hypothesis in the level of error 0.01 is rejected then could resulted that perceived ease of use hasn't positive effect on technology acceptance by Iranian accountant.

Third Hypothesis: With regard to Pearson Correlation 0.337 and P-value = 0.00 hypothesis in the level of error 0.01 is accepted then could resulted that perceived ease of use has positive impact on perceived use fullness.

Table No.2, Pearson Correlation Results					
Factors Hypotheses		Perceived Usefulness	Perceived Ease of Use	Result	
First Hypothesis	System Usage	Pearson Correlation	0.368		Accept
		Sig. (2-tailed)	0.000		
		N	145		
Second Hypothesis	System Usage	Pearson Correlation		-0.160	Reject
		Sig. (2-tailed)		0.054	
		N		145	
Third Hypothesis	Perceived Usefulness	Pearson Correlation		0.337	Accept
		Sig. (2-tailed)		0.000	
		N		145	
Forth Hypothesis	Social Factors	Pearson Correlation	0.203		Accept
		Sig. (2-tailed)	0.014		
		N	145		

Fifth Hypothesis	Social Factors	Pearson Correlation	0.260	
		Sig. (2-tailed)	0.002	Accept
		N	145	

Fourth Hypothesis: With regard to Pearson Correlation 0.203 and P-value = 0.014 hypothesis in the level of error 0.01 is accepted then could resulted that existence of social factors has positive impact on perceived use fullness by Iranian accountant.

Fifth Hypothesis: With regard to Pearson Correlation 0.260 and P-value = 0.002 hypothesis in the level of error 0.01 is accept then could resulted that existence of social factors had positive impact on perceived ease of use by accountant.

VIII. Results and Research Findings

Research results indicate second hypothesis refusal which demonstrates the lack of accountant's motive to learn IT. Acceptance of first hypothesis indicates the perceived usefulness among accountants acceptance of third hypothesis denotes direct effect of perceived ease of use on perceived usefulness.

Also, the acceptance of forth hypothesis demonstrates the positive effect of social factors on perceived usefulness in other words. The acceptance of forth hypothesis states the positive effect of social factors on perceived ease of use indicating the perceived ease of use among accountants and their colleagues and making positive approach toward perceived ease of use.

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