

REVIEW OF TECHNOLOGY ACCEPTANCE AND USE BEHAVIOR

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Abstract

With the development of information and communication technology, all aspects of modern life, especially economic dimension has changed as deep and fundamental and this trend still continues. Organizations must analyze all aspects of enter technology to their own organization before transfer technology that it can done by utilizing technology acceptance model which provides comprehensive investigated topics. In this paper, various models of technology acceptance and use behavior are examined, and in the end, the proposed research model is presented.

Keywords: Behavioral Intention, Technology Acceptance, Intention to Use

1. Introduction

Moving toward new technologies for organizations is undeniable (Heidarieh & et al, 2013). Due to the growth of technology (Ganjinia & et al, 2013), acceptance of new technology is one of the most controversial issues in today's society like any other phenomenon requires a change (Karkhaneh & Mohammadi, 2013). Adoption of innovations related to the tendency of people to use it and make matching between innovations and economic, social and its features (Kahzadi, 2001). On the other hand, the adoption and development of e-commerce depends on a set of policies that favor its development (Gilaninia & et al, 2011). To investigate Consumer behavior is vital for organizations and is means to achieve success (Abdolvand & Abdolazimi, 2012).

Increased growth new technology and with the development of electronic systems (Gilaninia & et al, 2011), identify the desires of consumers and their ability to use this technology has made the important necessity. The concept of "technological readiness" has developed to identify the consumers of new technologies to achieve the goals (Parasuraman, 2000:374). Research about the determinants of user's decision to accept technology show that the success of an investment in information technology depends to the tendency of users to use (Dehghan & et al, 2012).

So far, most research has been done in the field of technology acceptance models and entrepreneurial potential. Since the study of factors affecting the behavior it is necessary to institutionalize, thus several theories have been proposed like the theory of the "Davis"," Fishbein & Ajzen "," Krueger","Venkatesh", etc (kafashan,2010). So in this paper has studied a number of theories and will be presented proposed model according to these theories.

2. Literature Review

2.1. The Theory of Reasoned Action

Theory of reasoned action by " Fishbein" and " Ajzen " in 1975, was introduced to test the relationship between attitudes and behavior. According to this theory, behavior is influenced by tendencies and tendencies behavior is influenced by the attitude to technology. Subjective norms and attitudes are the main index of individual behavior.

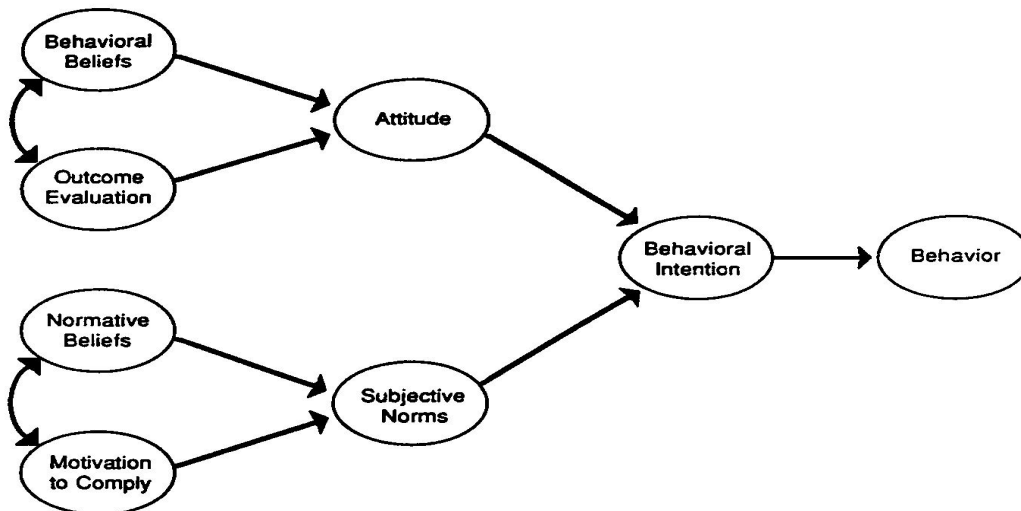


Figure (1) Theory of Reasoned Action (Fishbein & Ajzen, 1975)

2.2. The Theory of Planned Behavior (TPB)

Since the theory of reasoned action was used in the social sciences, researchers found that this theory has several limitations. One is that when in this theory behavior is under the control and authority, acts completely success. If a behavior not be under control, even though the person may be highly motivated by the attitude and subjective norms, but most likely he will not behavior as actual. One of the biggest limitations is that people have little power or control over their behavior or they feel that it is. To balance in these constraints, Ajzen in 1991 is added a third element in the name of perception of behavioral control to the basic theory. By adding this element, thus the same as the theory of planned behavior that predicts the behavior of individuals controlled by the involuntary (Fatahi, 2011).

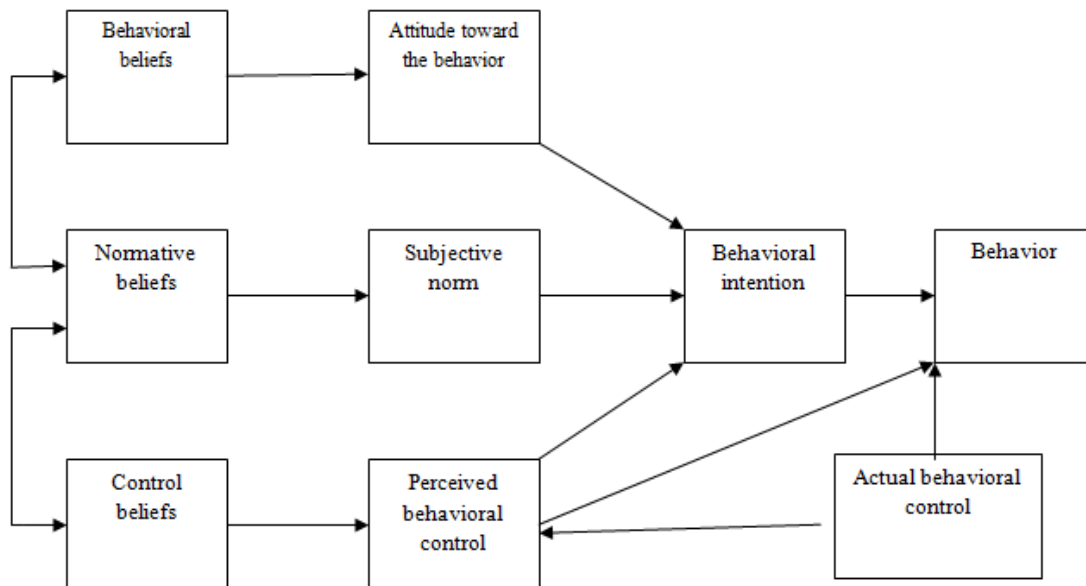


Figure (2): The theory of planned behavior (Ajzen, 2002)

2.3. The Technology Acceptance Model (TAM)

Technology acceptance model was developed by Davis in 1986. This model explains and predicts information system acceptance by individual. TAM is used as an instrument to study

the acceptance and use of technology according demand of using information system / IT. Generally in most cases from the perspective of planning, TAM is enabling to guidance, development, innovation and implementation of technology to a more useful (Yiu, et al, 2007, 336-351) .

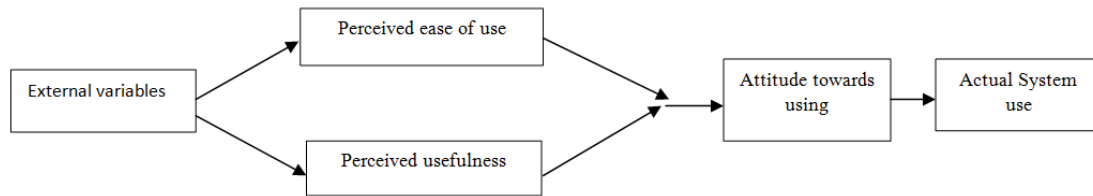


Figure (3): Technology Acceptance Model (Davis, 1989)

2.4. The Entrepreneurial Potential Model

This model was introduced by Krueger & Brazeal in 1994. This model is a combination of the theory of planned behavior and entrepreneurial potential. According to this model, entrepreneurial approach requires to the potential to start business that is defined in three basic structures: (Khaghani & et al, 2012).

Perceived desirability, perceived feasibility and propensity to act (Guerrero & et al, 2006).

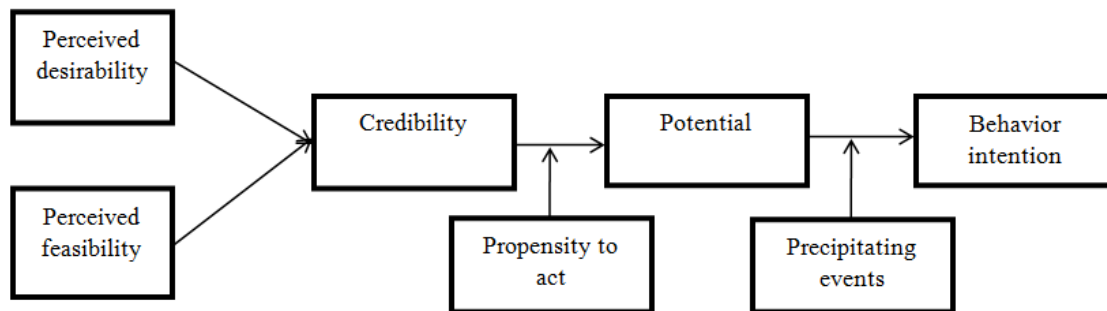


Figure (4): The Entrepreneurial Potential Model (Krueger & Brazeal, 1994)

2.5. The Unified Theory of Acceptance and Use of Technology

Venkatesh & et al (2003) proposed unified theory of acceptance and use of technology. Venkatesh and Davis were developed initial technology acceptance model to describe the perceived usefulness and intention to use based on cognitive processes and social effects. According to studies done, four key elements have significant impact on acceptance behavior and use of technology that are: performance expectancy, effort expectancy, social influence, facilitating condition. Figure (5) the elements of this theory into a coherent model have shown:

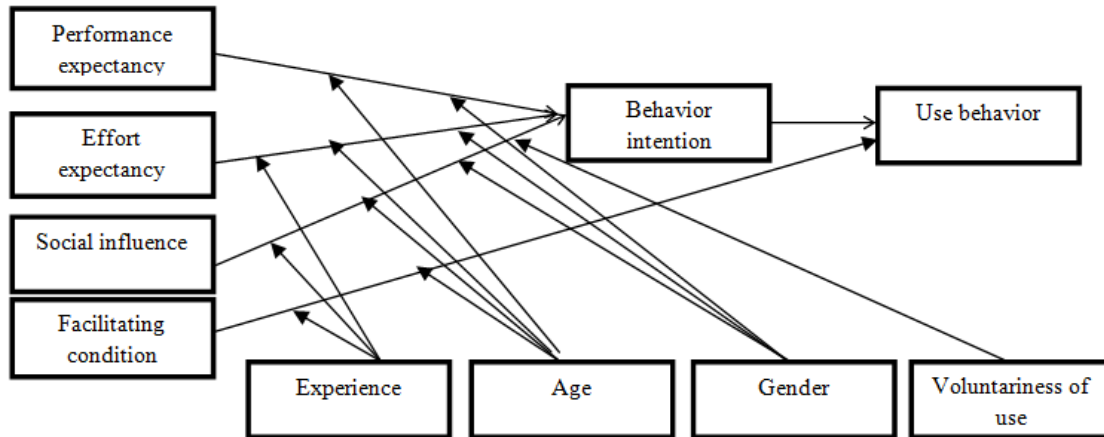


Figure (5): Unified Theory of Acceptance and Use of Technology (Venkatesh & et al, 2003)

3. Modified Conceptual Model of Research

According to the presented models and the results of various studies, the researcher recommends modified conceptual model as follow:

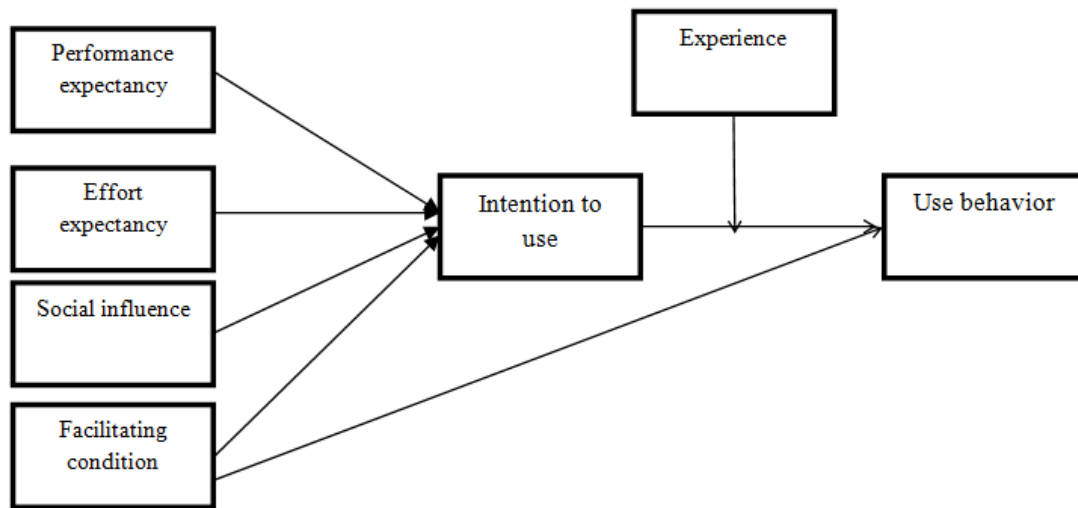


Figure (6): modified conceptual model

4. Discussion and Conclusion

Acceptance of new technology is one of the most controversial issues in today's society like any other phenomenon requires a change. A lot of research in the world studies this issue and has been proposed various models and theories. With the development of information and communication technology, all aspects of modern life, especially economic dimension has changed as deep and fundamental and this trend still continues. Organizations must analyze all aspects of enter technology to their own organization before transfer technology that it can done by utilizing technology acceptance model which provides comprehensive investigated topics.

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