Application of Behavioral Theory in Predicting Consumers Adoption Behavior

Mahmud Akhter Shareef, Sprott School of Business, Carleton University, Ottawa, ON, Canada
Vinod Kumar, Sprott School of Business, Carleton University, Ottawa, ON, Canada
Uma Kumar, Sprott School of Business, Carleton University, Ottawa, ON, Canada
Ahsan Akhter Hasin, Department of Industrial and Production Engineering, Bangladesh University of Engineering & Technology, Dhaka, Bangladesh

ABSTRACT

A society produces some values, ideas, intentions, and speculations about the human personality. These perceived psychological phenomena depend on rules, regulations, relationships, culture, tradition, etc. Depending on cultural factors, the behavioral intention to adopt online system operated through information and communication technology (ICT) can be affected vividly. Since adoption of ICT potentially depends on citizens’ beliefs and attitude toward technology, adoption behavior of users should be revealed considering citizens behavioral differences. Technology Acceptance Model (TAM) by Davis et al. (1989) is a strong information system theory that models how users come to accept and use a technology. However, the foundation of TAM including many other ICT adoption models has been developed from the deep insight of two popular and widely used behavioral theories named Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB). To understand ICT adoption behavior, these two theories can provide generalized concept of human behavioral attitude and different beliefs which ultimately lead to behavioral intention to adopt ICT. This study has set its first objective to explore TRA and TPB as the theoretical foundation of behavioral attitude toward ICT-based online adoption. Then, based on that theoretical paradigm, our second objective focuses on developing a theoretical framework of revealing generalized ICT adoption and diffusion behavior.

Keywords: Adoption, Attitude, Behavior, Behavioral Intention, Belief, Information and Communication Technology (ICT), Technology Adoption Model (TAM), Theory of Planned Behavior (TPB), Theory of Reasoned Action (TRA)

BACKGROUND

Strong evidence from scholarly studies and cross-cultural theories regarding cross-cultural implications for attitudes toward information and communication technology (ICT), increases our intention to reveal the impacts of behavioral differences on the belief-attitude model toward technology. Basically, the controlled process of technology development, diffusion, disruption, and adoption has cultural, behavioral, and social aspects (Kumar et al, 2008). Irani et al. (2007)

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claimed that ICT adoption behavior is highly controlled by socio-psychological traits which signify the impact of behavioral differences. Posey et al. (2010) investigated online adoption behavior and concluded that behavioral attitude toward ICT-based online system should be evaluated considering different potential beliefs which form actual behavior. Tajfel (1972), in social identity theory, strongly asserted that social identity, which is potentially governed by attitudinal behavior, has a substantial impact on paradigms of users behavior. Chen and Li (2010) also asserted this argument that, “The personalities of consumers play a principal role while they adopt a new technology or service either in the context of work or home”.

The adoption and extensive use of ICT-based online systems in public and private organizations has expanded dramatically. The Internet has become, within a very short time, one of the basic building blocks of modern society. Many countries now consider understanding online systems and mastering the basic skills and concepts of ICT as part of the core of economic development. It is the single most powerful tool for participating in global markets, promoting political accountability, improving the delivery of and cost cutting in basic services, developing efficiency in operations of public and private organizations, and enhancing local development opportunities. Researchers indicate that, since the 1980s, about 50 percent of all new capital investment in organizations has been in information technology (IT)-based online systems (Westland and Clark 2000). This huge investment in online systems and ICT can only be realized if its full potential is achieved. For ICT to achieve its full potential, it must be accepted and used by employees of organizations internally and by citizens externally. Explaining user acceptance of new technology is often regarded as a research area of great potential in contemporary ICT literature (Hu et al. 1999). Organizational theorists, IT professionals, psychologists, sociologists, economists, market researchers, policy makers, and academics are all keenly interested in analyzing different aspects of the IT-intensive online system adoption from their own fields.

The globalization of the market economy is extremely helpful in understanding technology diffusion and adoption in developed countries as well as in some developing countries regarded as Asian giants—such as Singapore, Hong Kong, Taiwan, Malaysia, South Korea, China, Singapore, Thailand, and India. However, the diffusion of ICT and acceptance of online systems do not follow a single track for all countries. In each country, the different economic and government policies and differences in social, cultural, and behavioral aspects are very significant and prominent. This paper mainly concentrates on evaluating ICT-based online system adoption and diffusion criteria based on the previously mentioned perspectives. Researchers also argue that the cultural, social, and behavioral attitudes in adopting online systems are strongly affected by some external attributes arising from political, economic, and marketing issues (AL-Shehry et al., 2006; Damodran et al., 2005). Chen and Li, (2010) revealed, “The service space is a virtual environment where transactions take place through virtual channels, no longer requiring the physical presence between customers and service providers”. Since ICT related adoption behavior is primarily conducting in virtual environment, exploring and conceptualizing adoption behavior for ICT has its own contemporary merit. However, before going into further analysis regarding those aspects, we examine brief definitional concepts of ICT.

Information technology known as information and communication(s) technology (ICT) and Infocomm (in Asia), is concerned with the use of modern computer-based technology in managing and processing information in different public and private sectors. Computer-mediated networks are electronically linked devices that communicate interactively over network channels. Generally, electronic devices are computer-enabled, as in the case of a typical telephone linking with a computer-enabled interactive telephone system. Typically, the interactive link involves minimal human intervention, though someone activates the electronic devices, accesses the network, and may even assist with the process or transaction.
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