

A Qualitative Study on the Adoption of Bring Your Own Device (BYOD) Practice

*Ibrahim Arpaci, Department of Computer Education and Instructional Technology,
Gaziosmanpasa University, Tokat, Turkey*

ABSTRACT

The consumerization of information and communication technology (ICT) is a practically important research question. Throughout this paper, the author investigates the reasons that lead to this new and important practice. He analyzes the evolution and current state of ICT adoption research, identifying adoption patterns and determining factors, and hereby offers an integrative theoretical framework based on this body of research that illuminates the main pathways to adoption behavior. Results of this analysis allow one to realize a new phenomenon, Bring Your Own Device (BYOD), which has become essential for organizations. A qualitative study is conducted to explain organizations' adoption of BYOD. A constant comparative method is used to analyze data obtained by interviewing the senior level managers of 14 organizations. Findings show that security, privacy, perceived financial cost, and compatibility have a major effect on the adoption.

Keywords: BYOD, IT Consumerization, Privacy, Security

INTRODUCTION

Existing literature classifies technology acceptance theories based on their applicability to an individual or an organization. Main theories used to explain Information and Communication Technology (ICT) adoption at the individual level are Technology Acceptance Model (TAM, Davis, 1989; Davis, Bagozzi, & Warshaw, 1989), Theory of Planned Behaviour (TPB, Ajzen, 1985, 1991), Innovation Diffusion Theory (IDT, Rogers, 1995), and Unified Theory of Acceptance and Use of Technology (UTAUT, Venkatesh, Morris, Davis, & Davis, 2003). These theories have been extensively used to explain individuals' acceptance and use of an ICT (Knudsen & Roman, 2015; Ramayah, Chiun, Rouibah, & May, 2014; Shih, 2013; Alwahaishi & Snášel, 2013; Abroud, Choong, & Muthaiyah, 2013; Ko & Lu, 2012; Islam, 2011).

TAM focuses on two theoretical constructs, perceived usefulness and perceived ease of use, which are theorized to be fundamental determinants of a system use. Davis (1989) developed

DOI: 10.4018/IJEA.2015070101

his psychometric scales for both perceived usefulness and perceived ease of use in three stages; a pretesting stage with a sample of 15 computer users, an empirical field study with a sample of 120 computer users, and a laboratory experiment with a sample of 40 voluntary MBA students, each time he modified and refined the scales. Davis (1989) found that both perceived usefulness and perceived ease of use are significantly correlated with system use. However, perceived usefulness have a greater correlation with system use than that of perceived ease of use. Moreover, Davis (1989) suggested that perceived ease of use and perceived usefulness predict attitudes, which can be defined as users' evaluation of the desirability of using a system. Attitude and usefulness influence individuals' intention to use a system. In addition, actual use of a system is predicted by behavioral intentions.

TPB (Ajzen, 1988, 1991) is an extension of Theory of Reasoned Action (TRA, Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). This theory suggests that behavior is determined by intentions to perform the behavior. Intention is predicted by three factors; attitudes toward the behavior, subjective norms, and perceived behavioral control. Attitudes, subjective norms, and perceived behavioral control are also related to appropriate sets of salient behavioral, normative, and control beliefs about the behavior.

Venkatesh et al. (2003) examined eight technology acceptance models and based on these examinations formulated a model that integrates and unifies the characteristics and elements of these models. First, they reviewed eight models to identify determinants of intention and use of information technology. Second, they empirically compared these models using longitudinal data from four organizations. Finally, the conceptual and empirical similarities across the eight models were used to formulate UTAUT. This theory posits that three direct determinants of intention to use are performance expectancy, effort expectancy, and social influence and two direct determinants of use behavior are behavioral intention and facilitating conditions. In addition, significant moderating influences of experience, voluntariness, gender, and age are confirmed.

These theories inspired each other and as aforementioned they have conceptual and empirical similarities. For example, Fishbein and Ajzen (1975) proposed TRA, which postulates that individuals' behaviors are predicted by their behavioral intentions, and that intentions are jointly determined by attitudes and subjective norms. Later on, Ajzen (1991) extended TRA by proposing TPB, which postulates that individuals' attitudes affect their perception of control behavior, subjective norms, and behavioral intentions. Based on TRA, Davis (1989) proposed TAM, which suggests that adoption of a technology is predicted by perceived usefulness and perceived ease of use. Finally, Venkatesh et al. (2003) proposed UTAUT, which suggests that performance expectancy, effort expectancy, social influence, and facilitating conditions affect an individual's adoption of a new technology. UTAUT integrated and unified the characteristics and elements of eight models, including TRA, TPB, TAM, and IDT.

This section investigated the main theories on ICT adoption at the individual level. However, the following section presents a systematic review of the literature on ICT adoption at the organizational level. This comprehensive review may help us understand evolution of Bring Your Own Device (BYOD) phenomenon, which is the practice of allowing employees of an organization to use their own mobile devices for work-related purposes.

LITERATURE REVIEW

During literature review, Scopus and ISI Web of Science databases are searched for the time period from 2004 to 2015. Some keywords used in the search include combinations of adoption, organizational adoption, and technology adoption. Table 1 summarizes the studies on ICT adop-

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