

Chapter 3

Mobile Commerce Adoption in Organizations: A Literature Review and Preliminary Findings

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ABSTRACT

This chapter comprehensively reviews research conducted on mobile commerce adoption in organizations. From the literature, a number of factors from adoption theories such as the diffusion of innovation theory, the technology acceptance model, and so forth are identified, analyzed, and tabulated together with a set of research propositions in order to demonstrate areas in need of further research. The chapter proposes 15 adoption factors that may affect the intention to adopt mobile commerce in organizations. These factors are categorized into 3 groups, namely environmental and organizational, technological, and managerial and other factors, and explored through a qualitative study to shed light on their veracity. The authors conclude the argument by presenting a proposed adoption model and showing potential areas of interest to future researchers.

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INTRODUCTION

Wireless technologies and telecommunication networks are playing a significant role in modern life. Moreover, the use of innovative wireless devices such as smart phones and personal digital assistants (PDAs) is widespread and facilitates access to critical information and electronic transactions ubiquitously (Benou & Vassilakis, 2010). One study showed that, 50% of Australians access the internet using their mobile phone in 2011 (Sensis, 2011). Another study by Allied Business Intelligence (ABI) Research (2010b) reported that in 2010, 28% of Americans use their mobile phone to access the Internet on daily bases. Mobile or wireless devices are ubiquitous tools and are enablers of Mobile Commerce (m-commerce) or what's known as mobile electronic commerce. In reality, the interaction between technologies such as the Internet, mobile computing devices, and wireless networks (e.g. mobile network) facilitates the existence of m-commerce to offer many services to mobile consumers (Siau, Lim, & Shen, 2001). M-commerce is directly linked to electronic commerce (e-commerce) (Tiwari, Buse, & Herstatt, 2006). Whereas e-commerce provides "anytime" access to online services, m-commerce potentially allows users to perform online transactions "anytime and anywhere" (Saidi, 2009). This concept of "anytime and anywhere" transacting and accessing important business information can be considered as one of the most significant advantages of m-commerce that draws the attention of businesses and their employees (Varshney, Mallow, Ahluwalia, & Jain, 2004). According to Siau et al. (2001), m-commerce "is about delivering the right information to the right place at the right time" (p. 5) meaning that they are ubiquitous and purposeful tools reshaping the landscape of commerce.

M-commerce can be considered as the next generation of e-commerce. Therefore, to understand m-commerce as a modern concept, it is important to be aware of the definition of e-commerce; that

is, "the sharing of business information, maintaining business relationships and conducting business transactions using computers interconnected by a telecommunication system" (Rajaraman, 2005, p. 90). These telecommunication systems can be a secure private network or a public network such as the Internet (Rajaraman, 2005). On the other hand, m-commerce can be defined as any transaction (such as data entry and purchasing) or content delivery (such as reporting and notification) with monetary value that is performed through mobile networks and devices (Clarke III, 2008; Leung & Antypas, 2001; Zhang, Yuan, & Archer, 2002). There are many applications for m-commerce; for example, users can download ringtones or music, buy tickets to performances, perform banking transactions, shop for goods, send or receive emails, play interactive online games, and trade stocks (AlHinai, Kurnia, & Johnston, 2007). Other examples of m-commerce may include purchases from vending machines or paying for fuel using a cell phone's credit as a payment option. A recent study by ABI Research (2010a) estimated that in 2015, the m-commerce market would reach about \$119 billion, representing about 8% of the total e-commerce market. M-commerce also can improve productivity, and thus, organizations and businesses have opted to innovate and adopt m-commerce to offer greater and more widespread services to their different stakeholders.

M-commerce is not only an extension of e-commerce, it also represents a different business philosophy which requires the introduction of new business models (Alvarez et al., 2009; OECD, 2007; Stoica, Miller, & Stotlar, 2005; Tsalgatidou & Pitoura, 2001). Moreover, Nohria and Leestma (2001) stated that m-commerce is a modern channel of consumerism and a very powerful way to reach customers. According to Nohria and Leestma (2001), m-commerce offers ideal opportunities for companies that understand how consumers can benefit from a collaborative market such as a mobile services market. Furthermore, Varshney et al. (2004) stated that "in today's marketplace,

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