Chapter 40
Mobile Commerce Adoption

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ABSTRACT

Mobile commerce can be a great potential to generate new streams of revenue for many established and new businesses. The penetration rates for mobile phone subscriptions in many countries show that there are significant opportunities to invest in and introduce mobile commerce services in many of these markets. The aim of this research is to explore and identify the various factors that influence the intention to adopt mobile commerce in Saudi banks and telecoms. A number of these factors were included in this research as they are chosen from well-known theories and investigated in the current study within the mobile commerce context using principal component analysis technique. Based on the findings of the research, the mobile commerce organizational adoption model is proposed to support organizations in order to launch mobile commerce services into the market. The findings of the research show that seven components can affect the intention to adopt mobile commerce in Saudi banks and telecoms. The three most significant components that can affect the intention to adopt mobile commerce services in Saudi banks and telecoms are performance expectancy, organizational readiness, and mobile commerce features and opportunities. The results of this research propose seven hypotheses to be tested in the future by researchers from different countries.

INTRODUCTION

Since the introduction of smart phones, there has been a noticeable shift in the use of wireless technologies. We have now reached the stage where almost every new application has an equivalent mobile version. At the same time, telecommunication networks, including wireless, have become sufficiently reliable, fast, and widespread to provide the required connectivity for users around the world. Innovative wireless devices, such as smart phones, allow users to, amongst other things, conduct electronic transactions and access vital information anywhere and anytime (Benou & Vassilakis, 2010). Smart phones and other wireless devices have become ubiquitous tools that enable mobile electronic commerce, known as Mobile Commerce (mCommerce). According to Siau, Lim, and Shen (2001), the interaction between technologies such as the Internet, mobile computing devices, and wireless networks such as mobile networks facilitates the existence of mCommerce.

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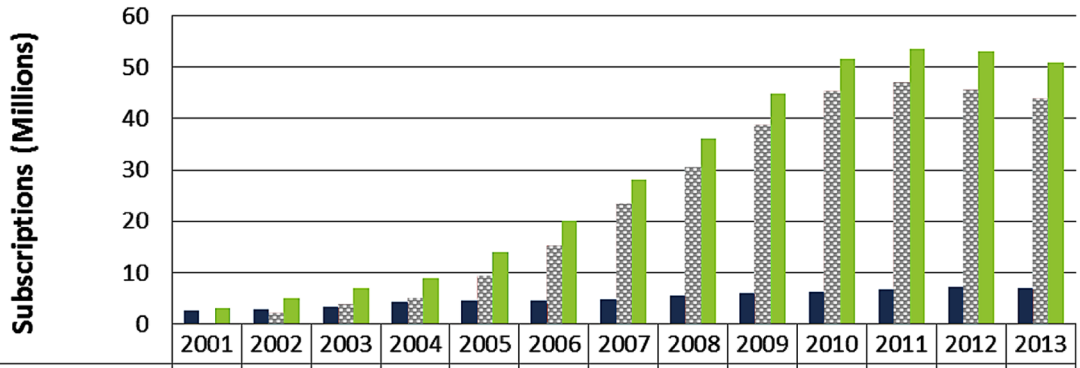
mCommerce can be considered as the latest version, or next generation, of electronic commerce (eCommerce). mCommerce can be defined as "the use of mobile, wireless (handheld) devices to communicate and conduct transactions through public and private networks" (Balasubramanian, Peterson, & Jarvenpaa, 2002, p. 349). mCommerce has many applications, such as, using location services to deliver location-based information and for tracking and logistics (Stoica, Miller, & Stotlar, 2005), as well as purchasing from vending machines or paying for fuel using a cell phone's credit. According to Tiwari, Buse, and Herstatt (2006), mCommerce is directly linked to eCommerce because all services in both are carried out by electronic means through computer-based networks and can be accessed using telecommunication networks. The only difference between the two is that eCommerce provides "anytime" access to online services whereas mCommerce potentially allows users to perform online transactions "anytime and anywhere" (Saidi, 2009). This capacity for "anytime and anywhere" access is one of the most significant advantages of mCommerce from a business perspective (Varshney, Mallow, Ahluwalia, & Jain, 2004). According to Siau et al. (2001), mCommerce "is about delivering the right information to the right place at the right time" (p. 5).

Based on the lack of studies about organizational adoption of mCommerce in the Kingdom of Saudi Arabia (KSA) and the significant investment opportunity that the Saudi market is offering for businesses, this research is focused mainly on mCommerce organizational adoption practices in the KSA. This paper presents a model of the factors that influence the intention to adopt mCommerce by Saudi organizations. According to the Gulfnews (2013), the smartphone penetration rate in the KSA is forecast to reach 50 per cent within the next four years and by 2015, the volume of mCommerce in the Middle East and Africa could reach $4.9 billion. According to Figure 1, by the end of 2013, there were approximately 51 million mobile phone subscriptions in the KSA representing an overall penetration of around 169.7 per cent of the Saudi population (CITC, 2014). Based on the large number of mobile subscriptions in the KSA and the rapid development in the Saudi mobile telecommunication market, it can be seen that there is a huge opportunity for organizations to adopt mCommerce services in the KSA. Therefore, this research primarily concentrates on the following research question:

Figure 1. The growth of mobile telecommunication market (Reproduced from (CITC, 2014))



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Post-paid	2.5	2.9	3.4	4.3	4.6	4.6	4.8	5.5	6.1	6.3	6.6	7.3	6.9
Pre-paid	0	2.1	3.8	4.9	9.5	15.1	23.6	30.5	38.7	45.3	47.1	45.7	43.9
Total Subscriptions	3	5	7	9	14	20	28	36	44.8	51.6	53.7	53	51

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