

# Chapter 7

## Factors Facing Mobile Commerce Deployment in United Kingdom

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### ABSTRACT

*This chapter discuss the challenges facing mobile commerce deployment in the United Kingdom. Although the number of mobile phone users is increasing and the technology is available for successful implementation of m-commerce, only a small number of users utilise m-commerce services. At the same time, mobile phones are becoming smarter, and most of latest phones are capable of connecting to the Internet. This chapter looks at the background of m-commerce as well as the technological development of mobile phones to their current stage. Also, technical and non technical issues which hinder the adoption of m-commerce are discussed and solutions and recommendations are given.*

### INTRODUCTION

The discovery of “radio waves” - electromagnetic waves and radio communication was behind the birth of new era of transfer and exchange information. That has been emerged in a number of technologies and applications such as; radio and TV broadcasting,

satellite communications and mobile communications. Hence, nations became interconnected across the globe and made it as one village. That has been strengthening with birth of the Internet; to complement other wire and wireless networks. As a result of this major advancement, new forms of lifestyle have evolved online applications; which evolves conducting tasks using the power of the Internet and networking infrastructure.

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Online shopping which as focus Electronic commerce (E-Commerce) is one of main platforms for trading and shopping. E-Commerce has become popular for both business and consumers. After then, the adaptation of E-Commerce over mobile networks (m-commerce) has evolved, particularly after the deployment of new mobile generations with high speed Internet access capabilities, which is seen as a key factor for fostering this kind of applications. That was expect to generate a big opportunities; but it was not the case in many countries including the UK, where the growth of m-commerce remind very slow and far below the expected penetration rate. In this chapter reasons behind the hindering of m-commerce will be discussed and recommendation for future m-commerce industry will be presented.

## **BACKGROUND**

Internet is growing very fast and millions of users are connected worldwide. It has changed the way people communicate, socialize, and live in general. Different businesses are also using Internet in the way they are doing their business, from selling of products and services to online banking. Business – to – Business (B2B) which involves trading between business and Business-to-Consumer (B2C) which facilitates trading between commercial organizations and consumers and Consumer-to-Consumer (C2C) are all part of Electronic commerce (E-Commerce). Now people can use mobile devices (Mobile phones and PDAs) to perform electronic commerce, and the term used for this is M-commerce, and its best described as

m-commerce = E-Commerce + mobile

M-commerce is possible when mobile phones can be connected to the Internet, but the use of Mobile phones for M-commerce (shopping) has not been popular in UK as predicted. M-commerce

has been in use since the end of twentieth century and has developed a lot from then, but in UK it is not as popular for conducting electronic commerce as it has been with Personal Computers (PCs) and compared with other countries like China and Japan where it is popular (Sadeh, 2002).

M-commerce started unsuccessfully with the introduction of Wireless application Protocol (WAP). This technology enables mobile devices to browse the Internet because it support extensible markup language (XML) and hypertext mark-up language (HTML) which are key languages used for Internet content. WAP enabled devices to run a micro browser. These are applications that suit the small memory size of handheld devices and the bandwidth constraints of a wireless handheld network. Another important M-commerce technology, which is used every day with mobile phone users, is short message service (SMS). This popular service allows short text messages to be sent from and to mobile devices at a low cost. This has a wide application in the use of M-commerce technology (Lewis D, 2004).

Mobile commerce was then coined in the late 1990s during the dot-com boom. The idea that highly profitable mobile commerce applications would be possible through the broadband mobile telephony provided by 2.5G and 3G mobile phone services was one of the main reasons for hundreds of billions of dollars in licensing fees paid by European telecommunications companies for UMTS and other 3G licenses in 2000 and 2001. PDAs and Mobile phones have become so popular that many businesses are beginning to use m-commerce as a more efficient method of reaching the demands of their customers. Although technological trends and advances are concentrated in Asia and in Europe, North America (Canada and the United States) is also beginning to experiment with early-stage of m-commerce. The recent alliance between Sprint Nextel and Clear wire for WiMAX networks being built for completion by 2008 will accelerate the more data-intensive 4G networks that will provide a turning point in m-commerce in North

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