

# Chapter 10

## Evolution of Electronic and Mobile Business and Services: Government Support for E/M– Payment Systems

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### ABSTRACT

*Mobile business and services are playing an increasingly significant role in economic activity for nations. However, one of the prerequisites for successful electronic business activity is to have practical and acceptable mechanisms to conduct electronic transactions. In this paper, the authors identify weaknesses in the mobile and electronic payments markets, namely hyper-competition that results in too much variation and lack of standards. The paper gains insights from previous works on the government and money nexus. The relationship between governments and money has continued to evolve. The current global and electronic environment now presents fresh challenges for the state, as payments extend across national jurisdictions and deal with new types of services and transactions. The paper provides the basis for developing theory to fully capture and recognise the development of mobility in an electronic and global market space and by identifying practical ways governments can support the evolving mobile payments industry.*

### INTRODUCTION

Mobile business and services are playing an increasingly significant role in economic activity. Developments in the mobile infrastructure and device technologies have opened up all the ser-

vices and potential that was available in a wired world to the mobile arena providing ubiquity of services regardless of location (Raina & Harsh, 2002; Barnes, 2003; Su & Adams, 2008). Mobile technologies are transforming the social and economic climate providing instant access to information and services (Rheingold, 2002). There are

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huge opportunities to develop mobile commerce (Urbaczewski et al., 2003; Hoegler, 2008).

Mobile/cell phones, PDAs, smart phones, Blackberrys, netbooks and laptops, are an integral part of working and social practice for a growing and significant numbers of people around the world (e.g., Anckar & D’Incau, 2002; Barnes, 2003; Damsgaard & Gao, 2004; Fitch & Adams, 2006; Raz, 2008). The evolving mobile arena is ubiquitous where for many people mobile technologies have become a necessity rather than a luxury (Skelton, 2003). In addition to providing all the services of the wired electronic world to a mobile platform, mobile business and services are evolving new services and functionality not previously available (e.g., Junglas & Watson, 2008; Ishii, 2004; Anckar & D’Incau, 2002). Perhaps one of the biggest potentials for mobile business and services is the evolving capabilities of mobile sensor technologies (Sohraby et al., 2007) opening up new business opportunities from transport to healthcare. These offer huge potential in enhancing value chains (e.g., increasing production quality, monitoring of distribution and delivery, more efficient use of resources) and providing new commodities and services (e.g., location support, context aware services, interactive multimedia entertainment, personal and personalised health support) (Sohraby, 2006).

There are clear strategic implications for organisations embracing mobile technologies: “mobile(m-) business is likely to have a tremendous impact on organisations, as wireless technologies and applications begin to challenge the existing processes, strategies, structures, roles of individuals, and even cultures of organizations” (Barnes, 2003, p. 2). Mobile working is changing working practices, internal operations, and management of resources along with customer interaction and provision of services.

Convergence from different industries such as telecommunications, computing, multimedia and many business sectors has been fuelling much of the change and innovation in the mobile arena. It is a fiercely competitive arena as innovations are

emanating from multiple directions where different companies, consortiums and business sectors try to develop better and more lucrative services for customers (Adams & Fitch, 2005; Lord, 2004). Within such a climate “new methods, tools and ways of thinking must be developed and refined to take advantage of mobility and its potential” (Urbaczewski et al., 2003, p. 32).

The potential of the mobile arena is affecting all aspects of society and the economy, even Government services. For instance, healthcare where there are considerable drivers for shifting health delivery towards home care, such as reducing costs of primary care (i.e. keeping people out of expensive hospitals) and increasing quality of life and independence for an aging population (Adams & Fitch, 2007; Mendonça et al., 2004; Maglaveras, 2003). Again mobile technologies are fundamentally changing professional practice providing extension to existing medical support systems (Mendonça et al., 2004) as well as the ability to do new things or provide services not possible previously (Archer, 2007).

The mobile electronic economy is growing and is becoming a significant aspect of the wider economy. In the longer term the mobile arena is likely to play an important role in economic, personal, social and working life for much of the population (Brooks, 2008; Constantiou et al., 2007; Ling, 2004). One of the main prerequisites for successful mobile and electronic business activity is to have practical and acceptable mechanisms to conduct electronic transactions. This is an area calling for more support and is needed for the mobile arena to reach its full potential (Brooks, 2008; Constantiou et al., 2007; Douthwaite, 2003). This paper focuses on how governments can provide support in this important area. The mobile arena provides a powerful avenue to encourage and develop economic activity and as such is a key area for government support. One of the main functions of government is to provide an environment for economic stability and encourage economic activity.

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