

# Chapter 9

## Regulatory Framework of Mobile Commerce

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### ABSTRACT

*Mobile commerce has given a new definition to wireless payment methods. It is new emerging technique which requires security at the top priority. Users are not still confident in using this technology. The proper infrastructure and support from government is required to deal with mobile commerce which can be achieved by developing fundamental regulatory framework. Regulatory framework described the technological and legal regulations to ensure the security in transaction in mobile commerce. It helps to deal with security related problem, financial issues and other legal issues that cause a hurdle in making mobile payment. A clearly defined regulatory framework is also required to enhance the customers' confidence and increase acceptance of mobile payment in their daily life. The cooperation and information sharing between telecommunication regulator, mobile service provider, and mobile operator and banking regulator is required to make a successful and efficient working regulatory framework.*

### INTRODUCTION

Mobile Commerce is emerging as ubiquitous technology among the existing wireless payment modes. Since users are becoming highly dependent on making transaction through mobile devices, it is very much important to have secure transaction techniques. Though mobile device's developers are doing much into incorporating security, yet the users are not confident in using Mobile Commerce. The research also states that achieving secure application is difficult without the infrastructure which fully supports security for computing application on the device. The prime flaw in emergence of mobile commerce is the government support and rules which they have to work or deal with mobile commerce.

Zhao(2003) stated that mobile-Commerce or M-Commerce is a commercial transaction carried through mobile phones. It can be a process, systems or procedure that includes checking account balance, depositing a change, buying or selling any product, all this doing on mobiles. M-Commerce is actually an extension of E-Commerce. Woo and Jang (2008) defined M-Commerce as e-Business with mobile device with in its fundamental concept and architecture.

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Mobile technology can be categorized into three generations. The first generation of mobile communication was analogue. The second generation used digital encoding for voice. The third generation which is in developing stage will support multimedia capabilities and circuit switched low speed data services. M-Commerce uses the different technology in all generation of mobile communication starting from first generation to fifth generation. These technologies are *RFID*, *SDR*, *AMC*, *Digital Signal Compression*, *Biometric*, *WAP IPV6*, and *Turbo Codes*. *RFID* is used in packing of products on store shelves, to pay for tolls and access fees, to purchase at vending machines. *SDR* overcomes the design problems of mobile devices. *Digital signal compression or Source coding* is employed to reduce bit rate requirement with lossless compression technique like the Lempel Ziv and Huffman code. *Biometric* control includes finger imaging, palm printing, hand geometry, iris and retina vascular pattern, stroke dynamics, voice recognition and speech pattern to authenticate user to access certain place and to monitor assets. *WAP* is an industry initiated standard, has emerged as a common communication technology and delivering wireless services on mobile. The feasibility of combining these technologies for use in a specific setting will be dependent upon security protocol.

In M-Commerce cookies are replaced with locator devices and these devices facilitate the tracking and monitoring the individual's activities. The location information can be captured even when device is merely on and not handling any call. Rose (2001) stated three major issues for necessity of trust. They are diverse nature, the intensive use of supply chain, the empowerment of workers and self-directed team work. One has to manage technological and business risks to get a satisfactory level of trust.

Simpson (2003) in his research showed that there are many incidents where personal information is disclosed without proper consent. Trust is the center of security risk in the case of mobile transaction. Green (2004) in his report said that consumers are more worried about their privacy and potential intrusion in M-Commerce environment.

To grow and develop M-Commerce in a country National IT infrastructure, Education and Awareness of citizen has important role to play. In short, future trends clearly indicate that the device manufacturers as well as service and infrastructure providers will keep adopting the *WAP* standard. The major issues related to use of infrastructure are skills availability of radio frequency, technology and service cost. A minimum standard availability can hinder development. Government is concerned with regulatory framework in development of M-Commerce.

This chapter is mainly around to provide the detail of regulatory framework set up by government to develop the usage of mobile commerce in every area of application in their nation. The main aim of this chapter is to discuss the regulatory framework to provide the existing technological and legal regulations that enforce security in transaction while dealing with Mobile Commerce. It has the detail of various acts to be used in business development through mobile devices. This framework provides the basic key finding in the security in data transmission during the transaction very efficiently and quickly.

## **Need of Regulatory Framework**

Australian media in 2000 reported that children who have access to mobile and enabled to pay, their parents/guardian considered being responsible for the debts. Using wireless technology in health industry records of patients can be moved from doctor's office using adhoc network formed for the purpose of consultation. There is no standard regulatory framework to enforce certain security related problems.

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