Chapter 4

Understanding Fraudulent Activities through M-Commerce Transactions

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ABSTRACT

Technology changes its facet quicker than anything else. Every few years there is a revolution that changes the way we perceive technology and the way it impacts our lives. Mobile commerce industry has been swiftly bringing about an alteration in how we access the wireless network and marks a shift from personal computers to mobile devices. This chapter gives an outline of mobile commerce and will discuss about the various frauds prevalent on the internet and on mobiles specifically, and ways in which it can be curbed. The purpose of this chapter will be to make readers aware of the different types of fraudulent activities that can occur due to m-commerce transactions and their possible solutions will be elaborated at the end. The work will be beneficial for the students as well as researchers to form a basic background about m-commerce, various risks associated with it and their possible solutions.

1. INTRODUCTION

1.1 Background

According to Muller Versee (2000) mobile commerce can be defined as “any transaction with a monetary value conducted via a mobile telecommunications network”. This definition contains two main terms - monetary value and mobile network (Coursaris et al, 2002), which are both discussed in detail.
in this chapter. This chapter also deals with the security issues and financial issues that occur in the m-commerce environment.

The various sections of this chapter are organized as follows - Section 2 discusses the understanding of m-commerce along with its architecture and different point of occurrence of frauds; Section 3 illustrate various kinds of frauds in m-commerce which is categorized into mobile network related fraud and M-commerce payment system related fraud; Section 4 presents solution to various frauds in m-commerce; and Section 5 & 6 discusses recommendation and conclusion of this chapter.

1.2 Features of M-Commerce

M-commerce comes with two major characteristics that are ‘mobility’ and ‘easy reach’ (Ngai et al., 2007). Mobility means portability, with the mobile device user can be reached anytime anywhere and consumer can use this feature for the transactions & purchasing. Wide usage of m-commerce includes applications in banking and brokerage, shopping, reservations and ticketing, entertainment, event management and Education. The major features of m-commerce includes Ubiquity, services can be availed anywhere, localization, positioning of the system, authentication, personalization and light weight of the devices (Fong & Yang, 2008; Data Monitor, 2001).

1.3 Merits of M-Commerce in India

Gupta and Vyas (2014) proposed various benefits and drawbacks related to m-commerce in India which are as follows-User friendly environment, easily carried device, works even on slow internet connections too and have secured transactions, as shown in Figure 1. Nowadays, specific mobile applications are being designed or the websites are becoming responsive since devices accessing these websites are changing pretty fast. Because of the small size of mobile devices, it is easy to carry it anywhere by user. This easy to carry mobile devices feature help user to avoid travelling in return of goods and services. Secure form of transaction is also another added advantage which is getting breached day by day. Low internet connectivity area are a boon for mobile users as at such places Mobile devices can work very well as compared to desktops or laptop as it uses less data thereby makes it economical and smoothly accessible.

Figure 1. Mobile commerce benefit in India
(Source: Gupta & Vyas, 2014).