

INTRODUCTION

Mobile Commerce, or m-Commerce, is about the explosion of applications and services that are becoming accessible any where, any time from mobile devices such as mobile phones and PDAs (Personal Digital Assistant). It involves new technologies, services and business models and it is quite different from the traditional e-Commerce. As a result mobile phones or PDAs open the door to a slew of new applications and services. They follow you wherever you go, making it possible to access the internet or connecting to a remote location while walking down the street with friends and family or while driving. "The mobile phone is now becoming an essential life management tool for mobile users, [1]" said Rob Conway, CEO (Chief Executive Officer) of the GSM (Global System for Mobile communication) Association.

Mobile payment (m-Payment) is defined as the use of a mobile device to conduct a payment transaction in which money or funds are transferred from a payer to a receiver via an intermediary, or directly without an intermediary [2]. In the 14th GSM Operators' Conference held in 2007 in Spain, Rob Convey mentioned that "By bringing payment capability into the mobile device, users will benefit from the ability to purchase items in a secure and convenient way from the comfort of their own mobile phones, hailing an end to bulky wallets full of notes and coins [1]". According to many independent research findings, m-Payment will soon be a dominant force in the business and society. By marketing surveys and speculations it has been found that there were 94.9 million m-Payment users worldwide in 2003 and the segment is expected to grow to 1.67 billion by 2008 [3].

m-Payment which might be the next generation of e-Payment (Internet and electronic payments), is being becoming more and more popular in developed countries because of the direct business to consumer transactions model and contact less connectivity via

mobile devices, but not much popular in developing countries due to various barriers such as infrastructure and coverage, technology, security etc.

1.1. Importance of m-Payment to Sri Lanka

Mobile penetration in Sri Lanka is very high when compared to the other developing countries and mobile phone has become an essential life management tool among the Sri Lankan. Also mobile usage is much higher than the internet usage in Sri Lanka. In the context of mobile penetration, Sri Lanka has done extremely well considering the fact that there is more than 30% mobile phone usage penetration in the country by start of year 2007 which is more than five million of the population (Figure 1). This is in comparison to the less than 2% internet usage penetration for the same period [4] [5].

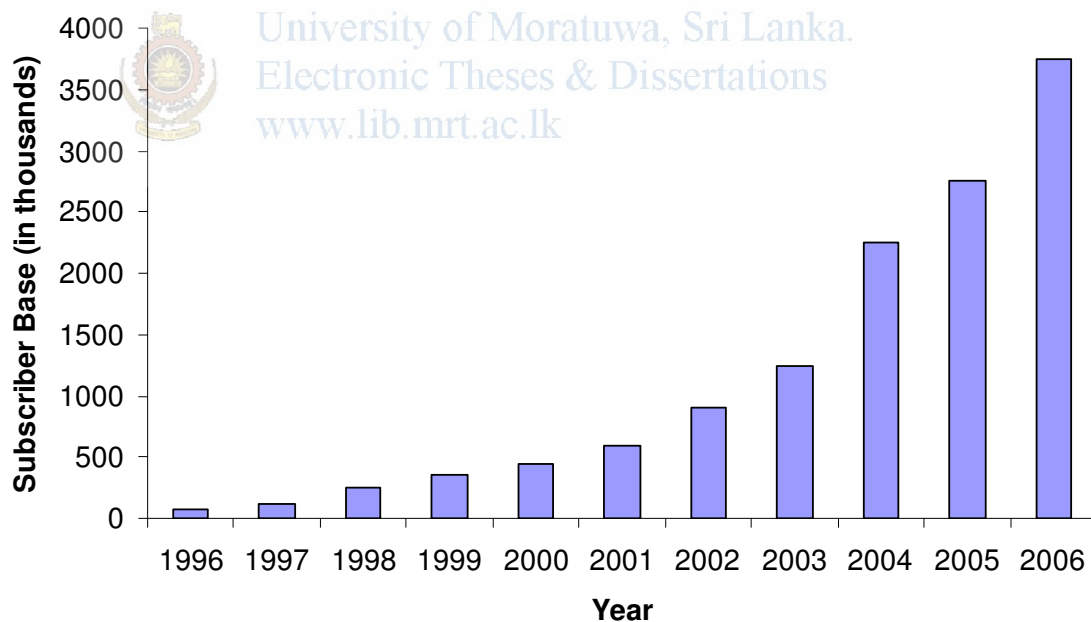
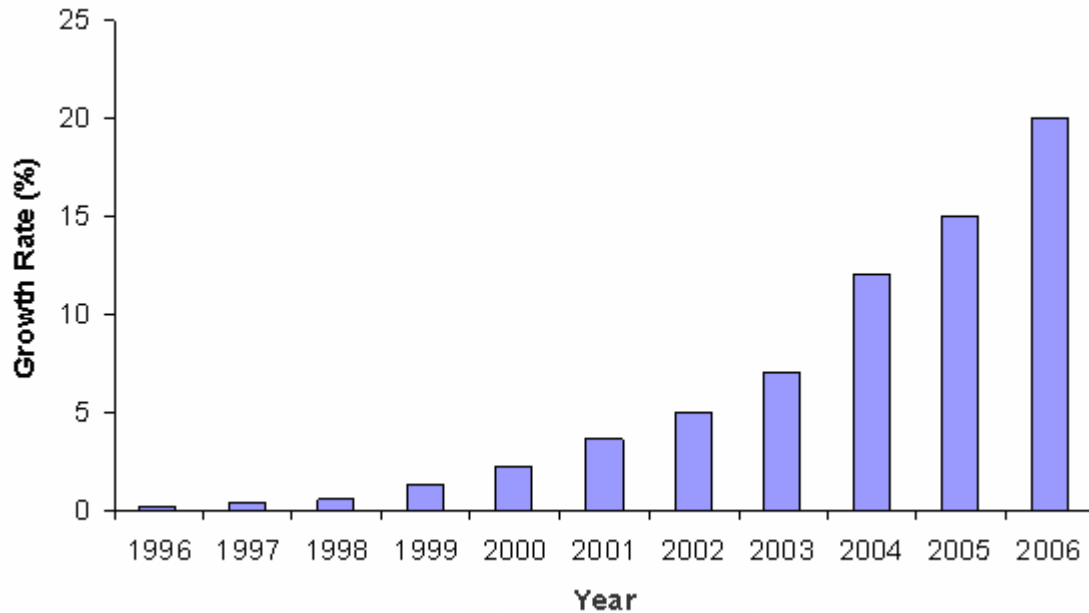


Figure 1: Subscriber Base during the Period of Year 1996 To 2006 (March)
(Source [6])

Also there is an exponential growth rate (Figure 2) in the growth of mobile phone usage in Sri Lanka which reveals that the mobile penetration will exceeds 50% of the population

with in next 2 to 3 years. Therefore in terms of mobile phone penetration and mobile coverage, Sri Lanka is well ahead of the other countries in the region.



University of Moratuwa, Sri Lanka.

Figure 2: Growth Rate of Mobiles per 100 people
(Source [6])

So this can be easily exploited as a very good media to reach the consumers and break the infrastructure barriers in e-Commerce in Sri Lanka. m-Payments is the best suited micro payment mode for countries like Sri Lanka due to various factors such as infrastructure availability compared to the other technologies such as internet and popularity of mobile phones among general public. But those factors are irrelevant unless the m-Payment applications are compelling and user friendly. As a result to optimize the m-Payment transaction usage, it is essential to identify the right mix of features that should be there in the m-Payment applications and the barriers against successfully adaptation of m-Payment services in Sri Lanka.

1.2. Problem Definition and Research Objectives

Will there be an interest and demand for the m-Payment applications in Sri Lanka?

Even though the mobile penetration is very high and popular in Sri Lanka, there should be some compelling advantages and user friendly features in m-Payment applications to attract customers and using the m-Payments. On the other hand due to the complexity of the payment system and other factors such as lack of widespread merchant acceptance, will there be a real interest or demand for this? This is one of the major issues when introducing a new technology. Because of the fact that technology acceptance differs from a country to country, it is really important to identify the correct technology before investing huge amount on new technologies. The problem here is that there are lots of critical success factors that the success of the application will depend on and the right mix of factors varies from country to country.

This research was conducted to evaluate and analyze m-Payment adaptation in Sri Lanka. The research mainly focuses on the technology acceptance in Sri Lankan context and the main barriers against introducing mobile payments in Sri Lanka.

The main objectives of this research are;

- Evaluation m-Payment technology adaptation in Sri Lanka
- Identifying barriers against adaptation
- Identifying factors that drive adaptation
- Defining a model for Sri Lankan context