# Customer Value Analysis on Mobile Services: A Study on Mobile service users in Sri Lanka

By

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The work described in this thesis was carried out by me under the supervision of Dr. Saman Yapa Head/Senior Lecturer, Department of Decision Science, University of Sri Jayewardenepura and a report on this has not been submitted in whole or in part any university or any other institution for another Degree/Diploma.

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I certify that the above statement made by the candidate is true and that this thesis is suitable for submission to the University for the purpose of evaluation.

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#### ABSTRACT

Today, the use of mobile communication services has become a necessity of people in Sri Lanka. The steady growth in the mobile sector has been driven by increased competition and affordable services and devices.

Although the use of mobile services is increasing, very few academic researchers have been done on mobile services in Sri Lanka. The objective of this research was to decompose the customer value as perceived by Sri Lankan mobile service users. The methodology of the study was a survey and used the convenience sampling method. Primary data were collected from 250 mobile service users in the Western Province in Sri Lanka. The study used both descriptive and statistical analysis to understand the mobile usage in Sri Lanka.

The demographic data were analyzed based on gender, age, education, nature of job/ activity, mobile phone brand, service provider, service package in use, monthly mobile bill, usage of mobile service mainly for and the number of service packages in use. There were four customer value indicators considered in the conceptual framework namely; monitory savings, convenience, entertainment and exploration were measured by using Likert scale statements. The principle component analysis method was used in order to analyze the factors on customer value on mobile services. Factor analysis revealed that two factor solution best represent the customer value on mobile services. The new model developed based on the factor analysis consists two factors; convenience and infotainment which is the information based media content or programming that also includes entertainment content in an effort to enhance popularity with audience and customers.

#### **CHAPTER 1 INTRODUCTION**

#### 1.1 Background

The Sri Lanka telecommunication sector has been considerably expanded in recent years. Sri Lanka Telecom was the first telecommunication entity in Sri Lanka started operations in 1858. The Sri Lanka Telecom (SLT) was the first service provider of basic telephone services in Sri Lanka acted as a monopoly status entity until 1996. In 1980, four mobile operators started operations in Sri Lanka. According to the Telecommunications Regulatory Commission of Sri Lanka (TRCSL), by mid 2009 there are around 60 companies had started providing a variety of telecommunication related services around the country which has facilitated to increase the usage of mobile telecommunication services.

The telecommunication industry consist a number of sub sectors like data communications, telepathy, internet and cellular services. The cellular/mobile service sector has become more generous year by year in the telecommunication sector. As per the central bank report published in 2012, the total Sri Lanka's population was 20,328,000 and among that 20,324,070 of people have mobile phone connections which represent nearly about 99.9 percent. Also by 2002, the mobile phone subscribers surpassed the fixed line/ location based telephone services. The statistical reports published by Census and Statistics Departments of Sri Lanka reviled that the popularity of mobile phone usage among the people are increasing continuously in Sri Lanka.

Mobile phones have become the primary form of telecommunication in both developed and developing countries. The first portable mobile phone was produced by

1

company, Motorola in1983 (www.tech-faq.com). Afterwards, mobile phone usage proved remarkable increase over period of time. Many researchers discovered that 1 billion mobile phone users were accumulated in 20 years after its creation but growth was so unbelievable that it took just 40 months to strap up another 1 billion and then only 2 years to hit the 3.5 billion users. (www.mobilephonerevews.org)

	(millions)						Per 100 inhabitants						
Fixed telephone lines	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011	
Developed Countries	565	546	544	524	513	494	46.5	44.8	44.5	42.7	41.6	39.8	
Developing Countries	696	708	705	690	676	665	13.0	13.0	12.8	12.4	11.9	11.6	
World	1'261	1'254	1'250	1'214	1'189	1'159	19.2	18.8	18.6	17.8	17.2	16.6	
Mobile cellular subscriptions													
Developed Countries	1127	1243	1328	1391	1408	1461	92.9	102.0	108.5	113.2	114.2	117.8	
Developing Countries	1'620	2'127	2'708	3'259	3'965	4'520	30.2	39.1	49.1	58.4	70.1	78.8	
World	2'747	3'370	4'035	4'650	5'373	5'981	41.8	50.6	59.9	68.3	78.0	86.7	

Table 1 Global Fixed and Mobile phone usage

Source: International Telecommunication Union, 2011.

As per the GSMA projections, by 2010, that 90% of the world was covered by mobile networks and mobile communication deliver data, internet and voice services to more than 5 billion people by 2015 – double the number connected today (GSMA, 2007).

Sri Lanka as a middle income country, use of mobile phones is now considered to be a necessity for most people. Sri Lanka entered into speedy development process where the usage of mobile phones has become a common feature among the people. The end of nearly three decades of war had explored the entire country to grab mobile phones for their communication purposes and this development has positively contributed to increase the number of mobile phones subscribers in Sri Lanka to 20,324,070 by the end of December 2012. Today mobile communication sector has been considered as the fastest growing sector by consolidating the increased investment and revenue. According to the TRCSL, the government is getting high revenue from this industry, which is over Rs. 30,000 million per annum.

Mobile phones provide ability to communicate with each other not only through calls and SMS; listen to music, surf the internet and even play mobile games but also even through sending e-mails as mobile phones are now consider as just like a mini computer that can be connected to the Internet. Mobile phones are even used as a camera, a video recorder and even as a radio and mp3 player. Especially the young people are the major uses of mobile phones in Sri Lanka.

When mobile phones were introduced to Sri Lanka in the 1980s people did not pay much attention to them because they were ignorant of their uses. Apart from that, the size of a mobile phone was similar to a brick. The price was around Rs. 100,000. At that time only few people could afforded and used mobile phones due to the high cost. Mobile phones were used as a good to show the wealth of the people although communication is the basic need. But within a very short period of time, mobile phones became popular among the people of every work of life. In other words, at the

time of mobile phone were introduced in Sri Lanka, some people purchased mobile phones mainly for prestige other than its usage or the service. Therefore, it is a known fact that many people use mobile phones as a symbol or as a showpiece to show their status in society. The shape, size and the features also quite different at the time mobiles were introduced. Although this fact has validity when concern smart mobile phones with latest features; today, the social value of mobile phones is very minimal. With the introduction of 3G mobiles, the industry has changed dramatically. People have now started understanding the value, convenience and ease of mobile phone. Now a day's, use of mobile phone service has become a necessity for day today life. Some people strongly believe and think that mobile phone is a must. They say that via mobile they can save their valuable time to do their daily tasks without delaying. People can communicate with each other while moving anywhere. This is very important reason to use mobile phones as today people are very busy with their daily works. In earlier days, very few people could think of buying mobile phone; but today, looking at the dropped prices, almost every individual can afford to purchase it. Mobile phones are equipped with every latest features which ever you desired. Even if you don't need the advanced features, people can get a basic mobile phone to make and receive calls. They can help to people in their fast lifestyles when they have no time to meet their friends, relatives and left with the only option of taking over the phone.

Owing to the reason of there are pros and cons of everything, mobile phones also has some disadvantages as advantages. The use of mobile phones by school children is one of major debate in Sri Lanka. There were many problems created in the society in recent past due to this, as many school children use mobile phones for meaningless purposes. Therefore, several educational institutes have banned the use of mobile phone by children. Some surveys have proved that usage of mobile phones is threat to the health as it contains radiations. Also there is medical evidence that constant use of mobile phones can lead to brain tumours and nervous problems. Although there are number of arguments against to the use of mobile phones today almost all of the people use mobile phones for various reasons in the world as well as in Sri Lanka. Therefore, it has become a necessity and part of people's life.

#### 1.1.1 Mobile Phone Features

Each mobile phone has two major components: the Subscriber Identification module or SIM card and the handset. Mobile phone features are continuously upgrading from its creation with the technology development.

A subscriber identification module or SIM is an integrated circuit that securely stores the international mobile subscriber identity on mobile telephony devices. A SIM is embedded d into a removable SIM card, which can be transferred between different mobile devices.

#### Voice

Mobile services allow mobile phone users to communicate with each other via voice, text, pictures or data. The use of mobile phones for voice communication is most popular thing today and also which is continuously increasing. People can chose most appropriate mobile communication service based on their income, preference and the services offered by various service providing companies in Sri Lanka. The competition among the mobile service providers is creating high value to the customers. Short Messaging Services (SMS) or text messages are most popular thing among the younger generation in Sri Lanka. SMS can also be used for other purposes such as businesses purposes, information obtain/dissemination and also other requirements. In addition to above, from recent past SMS has enabled people to take part in voting at the competitions, especially on TV competitions.

#### Multi-Media Messaging Services (MMS)

This is something new feature on mobile phones. This service is not available on cheapest mobile phones and available on GPRS (General Packet Radio Service) enabled mobile phones which are somewhat costly in market place. Mainly this service allows users to send each other pictures, with sound and longer length text messages. Also camera phones use MMS to send and receive picture messages. This is very popular in young generation in the world.

#### Internet & Email

User can access internet if they have Wireless Application Protocol (WAP) in their mobile phone. With the development of General Packet Radio Service (GPRS), access speeds have increased and through that user can access internet and email via mobile phones is becoming more popular and widespread. In this regard user has to pay only for the service according to the amount of data which they have actually downloaded. Also to access emails, mobile handsets itself have extra features or users can access through the operator's web page which are very similar to personal

#### Text