PROACTIVE CHURN MANAGEMENT IN
SRI LANKAN MOBILE
TELECOMMUNICATION INDUSTRY

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DECLARATION

This Dissertation paper contains no material which has been accepted for the award of any other degree or diploma in any University or equivalent institution in Sri Lanka or abroad, and that to the best of my knowledge and belief, contains no material previously published or written by any other person, except where due reference is made in the text of this Dissertation.

I carried out the work described in this Dissertation under the supervision of Dr. Udaya Kahangamage.

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Name of Supervisor : Dr. Udaya Kahangamage
ABSTRACT

Churn is the gross rate of customer loss during a given period. In other words, churn is a measure of the number of subscribers who leave or switch to another carrier's service. The frequent migration of customers is in a way a threat to mobile operators as the expense on customer acquisition is greater than retention. On the other hand, for any operator it is difficult to maintain a steady growth in the market without maintaining the existing customer. Due to profound competition, controlling churn rate is becoming a challenge to mobile operators and identifying reasons for Churn is an even greater challenge as it is highly dependent on the values, culture, attitudes and perception of the different segments.

As an extension to the literature review, for the research project, a survey was carried out, using a questionnaire, evaluated across various demographic factors (Age, Education level, Monthly income, Gender, etc.), to identify the main causes for retention or churn from one network in Sri Lankan context. The questionnaire was distributed among a selected sample of mobile subscribers and the responses were used for the analysis. Strategies that can be used to minimize churn rate were identified based on the feedback received for the questionnaire and by looking at the best practices available in the region. Finally, a model was developed to prioritize the influencing factors (Tariff, Coverage, Brand, VAS and QoS) to measure the overall customer satisfaction in the Sri Lankan mobile industry context (explained under Discussion of Findings). Also a study was carried out to check whether there is any relationship with demographic factors and influencing factors for churn. Finally, suggestions are provided for Sri Lankan mobile operators to build strategies to minimize churn.

As the conclusions of the research, it can be stated that Sri Lankan subscribers are highly price sensitive and majority of customers who have churned from one network to another is due to lower tariff rates offered by the latter. Further, it can be identified that features for different packages are not being properly directed to a target audience or a segment. Therefore, it is necessary to build new products or packages after cautious analysis of interests of different segments.
ACKNOWLEDGEMENT

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Nomenclature

MNP - Mobile Number Portability
ETACS - Extended Total Access Communication
AMPS - Advanced Mobile Phone Service
ARPU - Average Revenue per User
DAPMS - Digital Advanced Mobile Phone Service
EDGE - Enhanced Data Rates for GSM Evolution
GPRS - General Packet Radio Service
GSM - Global System for Mobile Communications
MMS - Multimedia Message Service
PRBT - Personalized Ring Back Tone
QoS - Quality of Service
SIM - Subscriber Identity Module
3G - Third Generations in mobile communication
CHAPTER 1 : Introduction

1.1 Sri Lankan Mobile Telecommunication Industry

Sri Lankan Mobile Telecommunication industry has shown a significant growth compared to other Industries, over the last few years. Especially after 2002, it is clearly evident that the growth rate of Sri Lankan Mobile Telecommunication market has changed exponentially.

![Cellular Subscriber Growth (1991 - 2008 Dec)](image)

**Figure 1.1 : Growth in Mobile Telecommunication Market in Sri Lanka [1]**

In relation to the concept of product life cycle, it is evident that the mobile industry is reaching its maturity stage. In this regard it is of paramount importance that the operators manage churn (i.e. subscribers leaving the network) as churn management helps retain market share. The expansion in the mobile market has given greater choice to mobile subscribers creating opportunity to switch from one operator to another if not satisfied with current service provider. The frequent migration of customers is in a way a threat to mobile operators as the expense on customer acquisition is greater than retention. On the other hand, for any operator it is difficult to maintain a steady growth in the market without
maintaining the existing customer. The present Sri Lankan mobile industry is extremely dynamic with new services & technologies, and also carriers constantly altering landscape. In the region, high churn rates impact as bad debts which cost over US$ 6 billion each year to Asian mobile operators [2]. Particularly, the two biggest markets in Asia – China and India – have churn rates that are significantly higher than the regional average.

Few facts about Churn [8]:

- Acquiring new customers can cost 5 -7 times more than satisfying and retaining current customers
- A 2% increase in customer retention has the same effect on profits as cutting costs by 10%
- The average Telco operator loses 10-20% of its customers each year
- A 5% reduction in customer defection rate can increase profits by up to 125%
- The customer profitability rate tends to increase over the life of a retained customer

1.2 Problem Statement

Due to profound competition, controlling churn rate is becoming a challenge to Sri Lankan mobile operators and identifying reasons for Churn is an even greater challenge as it is highly dependent on the values, culture, attitudes, operating philosophy, customer service and perception of the different segments. As per latest statistics, average monthly churn rate of Asian mobile operators is between 1 - 5% [2]. This has become a point of concern as it directly affects stability of the market Share. Reasons for churn differ from country to country as it depends on the culture, values and attitudes of people. Mobile operators should be dynamic and open to change and be able to flex strategies in order to minimize churn, as operator stability in the competitive market is quite dependent on customer retention (Churn Management).

1.3 Research Objectives

1. Identify the main causes for retention in a network or Churn from a network
2. Propose actions that can be used to minimize voluntary Churn
3. Propose actions that can be taken to minimize the effect of Churn or increase the loyalty to the network

4. Propose proactive actions that can be formulated to minimize the Churn Rate in Sri Lankan context

1.4 Scope of the Project

Scope of the project is to achieve the above mentioned objectives. Research scope is limited to the Sri Lankan telecommunication industry, aiming disseminate the research methodology developed as well as information collected.

1.5 Definition of Churn

Churn is a measure of the number of subscribers who leave or switch to another carrier's service. In other words churn is the gross rate of customer loss during a given period. Churn Rate can be measured using following formula.

\[
\text{Monthly Churn Rate} = \frac{(C_0 + A_1 - C_1)}{C_0}
\]

Where:
- \(C_0\) = Number of customers at the start of the month
- \(A_1\) = Gross addition or reconnection during the month
- \(C_1\) = Number of customers at the end of the month

High churn rate is a significant issue for any mobile operator due to following reasons.

- Loss of brand value
- Loss of opportunity to sell related products and value added services
- Increasing customer acquisition costs
- Lower average monthly revenue
- Increased deactivation costs
- More pressure to acquire new customers
- Increased risk
- Resources being underutilized
1.6 Types of Churn

There are 3 types of Churns.

1.6.1 Unavoidable Churn

Unavoidable churn occurs when a subscriber dies or moves out of the provider’s operating area.

1.6.2 Involuntary Churn

Involuntary Churn occurs when a subscriber fails to pay for the service & as a result, provider terminates the service. Termination of service due to theft, fraudulent service acquisition or fraudulent usages is also classified as Involuntary Churn. More often in Sri Lankan environment, disconnections happen due to non payments even after exceeding credit limit, fraud or non usage.

For a post paid package there is a maximum amount that can be used without disconnection, which is commonly known as the “Credit Limit”. If a customer reaches the credit limit, operator notifies the customer dues and if not settled within a stipulated time period, the line will be disconnected. In Sri Lankan context this is a common mode of disconnection.

Further, in terms of pre paid packages, if customer does not use connection for a certain period of time, the line may be deactivated due to non usage.

1.6.3 Voluntary Churn

Voluntary Churn is the service termination on the part of the subscriber, when leaving one operator for another. This research is primarily focusing on Voluntary Churn.

Main possible causes for Voluntary Churn can be identified as follows.
Figure 1.2: Main Possible Causes for Voluntary Churn

**Adaptation:**

- **New Technology** - New technology can have an index to rank technologies offered by operators. If any carrier introduces its services into the market at first, there is a possibility of first mover advantage.

- **Pricing Plan** - Attractive pricing plans offered by competitors may cause churn. Carriers announce new rates and incentives, hoping to acquire new subscribers who are currently non-users or competitor subscribers.

- **Equipment Envy** - Equipment envy is not a factor in the Sri Lankan context, since it is not much popular to give the handset with a connection.
Internal Problems:

- **Lack of Features** – Most of the customers are keen about value added services as it adds additional value for them. So it is a duty of operator to introduce more value added services which are relevant to customers as it helps increase value for the customer.

- **Network and QoS** – Up until recent times, coverage was a key determinant of preferred operator, however it has changed over the years as all operators have managed to cover all significant areas and thus fails to be a competitive advantage. On the other hand call drop rates, congestions, etc. can lead to customer dissatisfaction.

- **Customer Service and Billing** – Complaints regarding bill returns, service connection and modification delays can be considered as a part of this category. Behavior, attitude, personality and knowledge of the service representatives may lead to customer dissatisfaction. Therefore customer service officers need to be well informed of services provided, promotional campaigns carried out etc, be of friendly nature and be efficient in service delivery in order to provide a satisfactory service to subscribers.

- **Lack of responsiveness** – When a customer queried about any service or product, if he does not get any feedback within a particular time frame, definitely the customer will end up with dissatisfaction with the network. So it is necessary to maintain a system that has the ability to track the customer requirement clearly and get actions against the request. Meanwhile knowledge management about existing services among the staff is required to give a good service.

- **Privacy concerns** – As mobile operators have records on customer personal information (name, address, call details etc), it is a duty of an operator to not expose any information to third party.
External Problems:

If a new operator comes in to the market with an attractive package or an existing operator introduces a more attractive package it may cause customers to migrate.
CHAPTER 2 : Overview on Sri Lankan Mobile Telecommunication Industry

2.1 Major Milestones of Sri Lankan Mobile Telecommunication History

Following are the few key milestones of Sri Lankan Mobile Telecommunication industry [1].

  - Purely Analog TACS (Total Access Communication System) and ETACS (Extended Total Access Communication System) Network.
- Dialog GSM started the first GSM network, 1995.
- Hutchinson TDMA started operations, 1997.
  - Analog Network
- Mobitel launched DAPMS (Digital Advanced Mobile Phone System) popularly known as TDMA technology, 2000.
- Mobitel and SLT alliance, 2002.
- Mobitel launched its fully fledged 2.5 G, GSM network in the 1800MHz band with EGDE/GPRS.
- Hutchinson introduced GSM under the brand name Hutch, 2004.
- Dialog Telekom launched Blackberry, 2006.
- Celltel was renamed as tigo, 2007.
- Bharathi Airtel started operations, 2009.

Following table gives an indication on the growth of subscriber base in the Sri Lankan mobile market.
<table>
<thead>
<tr>
<th>Year</th>
<th>Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>2,644</td>
</tr>
<tr>
<td>1993</td>
<td>14,687</td>
</tr>
<tr>
<td>1994</td>
<td>29,182</td>
</tr>
<tr>
<td>1995</td>
<td>51,316</td>
</tr>
<tr>
<td>1996</td>
<td>71,029</td>
</tr>
<tr>
<td>1997</td>
<td>114,888</td>
</tr>
<tr>
<td>1998</td>
<td>174,202</td>
</tr>
<tr>
<td>1999</td>
<td>256,655</td>
</tr>
<tr>
<td>2000</td>
<td>430,202</td>
</tr>
<tr>
<td>2001</td>
<td>667,662</td>
</tr>
<tr>
<td>2002</td>
<td>931,403</td>
</tr>
<tr>
<td>2003</td>
<td>1,393,403</td>
</tr>
<tr>
<td>2004</td>
<td>2,211,158</td>
</tr>
<tr>
<td>2005</td>
<td>3,361,775</td>
</tr>
<tr>
<td>2006</td>
<td>5,412,496</td>
</tr>
<tr>
<td>2007</td>
<td>7,983,489</td>
</tr>
<tr>
<td>2008</td>
<td>11,082,454</td>
</tr>
</tbody>
</table>

Table 2.1: Subscriber figures of Mobile Telecommunication Market in Sri Lanka [1]

The five player mobile telecommunication market in Sri Lanka is dominated by Dialog Telekom (54 %), followed by Mobitel (16 %), Tigo (15 %), Hutch (10 %) and Airtel (5 %).
Dialog Telekom PLC

Dialog GSM has been the country’s undisputed market leader in the mobile telecom industry since year 2000. The Company was incorporated in Sri Lanka under the name of MTN Networks (Private) Limited on 27 August 1993 and was initially promoted and owned by Sun Power Systems (Private) Limited and Telekom Malaysia. In November 1996 the local promoter divested its stake to Telekom Malaysia Group making the Company a fully owned indirect subsidiary of TM through its international investment arm TM International. The Company’s name was changed to Dialog Telekom Limited subsequent to its conversion to a public limited liability company on 26 May 2005 [10].

Key Milestone of the company

- 1995 Introduction of GSM Technology
- 1997 Introduction of Roaming
- 1998 Introduction of SMS
- 2001 Introduction of GPRS
- 2003 Introduction of Location Based Services
- 2003 Introduction of MMS
- 2004 Call Home Service for out bound roamers
- 2006 3G Commercial Launch
2006 Blackberry Launch

Considering Dialog's annual growth rate, Postpaid and Prepaid segments depict an annual growth rate of 31% and 69% respectively. Average revenue per postpaid user (ARPU-Postpaid) is Rs.1682.00, while average revenue per prepaid user (ARPU-Prepaid) stands at Rs.432.00 in 2008.

Dialog pays more attention to retain their existing customers through various strategies and as a result they are able to maintain Blended Churn rate (Weightage Average between Postpaid and prepaid) lower than 10% in 2006 that is comparatively low in South Asian region. However, ARPU has decreased while churn has increased over the past three years.
Hutch Telecommunications Lanka (Pvt) Limited

Hutchison Telecommunications Lanka (Pvt) Ltd., is a fully owned subsidiary of Hutchison Telecommunications International Limited - HTLL headquartered in Hong Kong. In 1997 HTLL commenced operations in Sri Lanka by setting up analogue base stations around Colombo. Year 2000 September - Hutchison Telecom Lanka launched its GSM services in the southern district of Matara. Currently Hutch runs only with a prepaid customer base but their subscriber growth rate has been around 200% during last year.

Key Milestone of the company

- 1997 Hutchison Telecommunications Lanka (Private) Limited ("Hutchison Telecom Lanka") commenced operations in Sri Lanka by setting up analogue base stations around Colombo.
- 2000 September - Hutchison Telecom Lanka launched its GSM services in the southern district of Matara.
- 2004 The brand Hutch was launched, the launch of prepaid service under the brand name Hutch.
- 2005 Hutchison Telecom Lanka acquired new GSM 1800 spectrum to enhance its existing GSM 900 network capacity.
- 2006 - The network became dual band.
- 2006 - 500,000 customers achieved in October.
- 2007 – 1 million customers in October

Figure 2.5 : Annual Churn Rate and ARPU [6]

Mobitel Lanka Limited

Mobitel was incorporated under a BOL agreement between Sri Lanka Telecom and Telstra Australia (Formerly OTC Australia (Pvt) Ltd) and Mobitel commenced commercial operations in providing Mobile communication services through AMPS (Advanced Mobile Phone System) technology in Sri Lanka on 11th February 1993. In 2002 Sri Lanka Telecom became the sole owner of Mobitel by acquiring the rest of the shares that was held by Telstra.
• 1993 commenced commercial operations in providing Mobile communication services through AMPS technology in Sri Lanka.

• 2000 Mobitel Launched DAPMS (Digital Advanced Mobile Phone System) popularly known as TDMA technology.

• 2002 November, Mobitel and SLT alliance

• 2004 January, Mobitel Launched its fully fledged 2.5 G, GSM network in the 1800MHz band with EGDE/GPRS. Mobitel acquired 200,000 subscribers on GSM within the first 6 months of Launching G.S.M

• 2006 Mobitel, Launched SMART 5, the revolutionary Prepaid package in the country that offers outgoing calls at Rs.5/- to any Network.

Tigo

Celltel, Sri Lanka’s first and eldest cellular network commenced Operations in 1989. At the beginning, Celltel was purely Analog TACS (Total Access Communication System) and ETACS (Extended Total Access Communication System) and in April 2000, Celltel launched the Digital GSM technology. In 2007, Celltel was renamed as Tigo as Milicom International Cellular (MIC) (owner of Celltel) wanted to go under a single brand for its global operation. Present active Customer Base of Tigo is 1,044,444 with a 15 % market Share (in Sri Lanka) [7].
Bharathi Airtel

Telecom giant Bharti Airtel is the flagship company of Bharti Enterprises. The Bharti Group has a diverse business portfolio and has created global brands in the telecommunication sector.

Bharti Airtel Limited, India’s largest integrated and the first private telecom services provider with a footprint in all the 23 telecom circles. Bharti Airtel since its inception has been at the forefront of technology and has steered the course of the telecom sector in the country with its world class products and services. The businesses at Bharti Airtel have been structured into three individual strategic business units (SBU’s) - Mobile Services, Airtel Telemedia Services & Enterprise Services. The mobile business provides mobile & fixed wireless services using GSM technology across 23 telecom circles while the Airtel Telemedia Services business offers broadband & telephone services in 95 cities and has recently launched India’s best Direct-to-Home (DTH) service, Airtel digital TV. The Enterprise services provide end-to-end telecom solutions to corporate customers and national & international long distance services to carriers. All these services are provided under the Airtel brand.

Highlights

- Alcatel-Lucent & Bharti Airtel appoint CEO of their managed services joint venture for broadband & telephone services
- Bharti Airtel Unveils New Global Wholesale Service Portfolio for Telcos Across the World
- Airtel launches Hosted Mail for SMBs
- Royal Government of Bhutan to partner with Airtel for fulfilling its 2013 ICT vision
- Airtel digital TV expands bouquet to 164 channels
- Airtel presents industry first – new ‘true and rich’ broadband experience
CHAPTER 3 : Managing Churn

Mobile operators should be dynamic and open to change and be able to flex strategies in order to minimize churn, as operator stability in the competitive market is quite dependent on customer retention. Following are various strategies that can be adopted to manage churn effectively.

3.1 Minimizing Involuntary Churn

More often in the Sri Lankan environment, disconnections happen due to non payments even after exceeding credit limit, fraud or non usage. There are various strategies to minimize involuntary churn [3].

- **Notification before disconnection** - It is mandatory to inform customer before disconnecting any mobile connection (applicable for post paid only). If there is no proper process for disconnection, definitely customer gets annoyed about the service. Credit limit offered for individual customer should be calculated as a function of deposit amount, network stay, Average bill amount and Payment pattern.
- **Churn scoring** - Based on the customer behavior (payment pattern, network stay, average bill amounts) it is vital to maintain a scoring mechanism to categorize customers for monitoring purposes. Risk/churn score can be used as an input parameter to decide offered credit limit.

3.2 Minimizing Voluntary Churn

For churn management, mobile operator has to improve their existing processes in acquisition, activation, controlling etc otherwise unnecessary delays may occur. Following areas should be addressed to manage churn effectively [3].

- Customer information management
- Customer strategy development
- Value proposition creation
- Customer operations
- Customer contact management
It is vital that the operators understand customer behavior based on analysis of customer records and identify strategies to minimize the churn of customers based on their past behavior.

**Key strategies include [3]:**

- Incentives and tariff bundles which target the most profitable customers
- Loyalty schemes which are appropriate to the value of the business saved
- Acquisition strategies which attract the right type of customer, reducing fraud and bad debt
- Proactive customer service including offering the best-fit tariff plan to the customer
- A commitment to quality in all aspects of the business.
- Geographical discounts
- Improvement for existing customers based on network stay

### 3.3 Strategies used by Sri Lankan mobile telecommunication operators to minimize Churn

#### 3.3.1 Strategies for Voluntary Churn

Current strategies used by Sri Lankan mobile operators are tabulated in the below tables.

**Loyalty Programs:**

<table>
<thead>
<tr>
<th></th>
<th>Dialog</th>
<th>Mobitel</th>
<th>Tigo</th>
<th>Hutch</th>
<th>Airtel</th>
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<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Nexus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skyward</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Core Network Services:**

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<th>Tigo</th>
<th>Hutch</th>
<th>Airtel</th>
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<td>Available</td>
<td>Available</td>
</tr>
<tr>
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<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>GPRS</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
</tr>
</tbody>
</table>
### Value Added Services:

<table>
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<th>Tigo</th>
<th>Hutch</th>
<th>Airtel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Back Up Up</td>
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<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>TV Broadcasting</td>
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<td>Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>SMS Based Applications</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>(News Alerts, Cricket Scores, Currency Rates, etc.)</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>MCA (Missed Called Alerts)</td>
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<td>Available</td>
<td>Available</td>
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</tr>
<tr>
<td>Ring Tone &amp; Picture Downloads</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
</tr>
<tr>
<td>Voice SMS</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>e Channeling</td>
<td>Available</td>
<td>Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

### Separate units for special customer segments:

<table>
<thead>
<tr>
<th>Dialog</th>
<th>Mobitel</th>
<th>Tigo</th>
<th>Hutch</th>
<th>Airtel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Club Vision Priority Corporate</td>
<td>Club Magnate</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
State of the art technologies:

<table>
<thead>
<tr>
<th>Dialog</th>
<th>Mobitel</th>
<th>Tigo</th>
<th>Hutch</th>
<th>Airtel</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GSM</td>
<td>• GSM</td>
<td>• GSM</td>
<td>• GSM</td>
<td>• GSM</td>
</tr>
<tr>
<td>• 3.5 G</td>
<td>• 3.5 G</td>
<td>• Blackberry</td>
<td>• Blackberry</td>
<td>• 3.5 G</td>
</tr>
<tr>
<td>• Blackberry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• M-Commerce</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3.2 Strategies for Involuntary Churn

3.3.2.1 Credit alerts using automated processes & systems

Dialog:

Based on the deposit amount, past payment patterns and network stay, separate credit limits are assigned to individual subscribers. When a subscriber exceeds the credit limit, following process will happen [10].

- Send a SMS Alert as a payment reminder
- If not paid, outgoing is barred
- After 2-5 days if still not paid, connection is temporary disconnected
- After 90 days, if the subscriber has still not made the payment, connection will be permanently disconnected.

3.4 Strategies used by Asia Pacific mobile telecommunication operators to minimize Churn

When considering the World Mobile market, Asian market has significant opportunities for mobile growth. By 2011, it is estimated that the Asia Pacific region will account for approximately 50% of the world’s entire mobile subscriber base, with a staggering 1.067 billion subscribers between China and India, the world’s two biggest mobile markets [3]. It is clearly evident that still potential opportunities for mobile market, exist in developing
countries like Bangladesh, Pakistan, Maldives, Sri Lanka as it shows high annual growth rates compared to the developed countries like Japan, Singapore, etc.

When subscriber growth rate and mobile penetration of Asia-Pacific countries are compared Sri Lanka, Bangladesh, India and Nepal seem to display similar properties.

Basically four interrelated factors play an important role in causing churn in Asia-Pacific region.
• Declining tariff
• Mobile Number portability
• Handset Subsidiaries
• New Competitors and Technologies

As a result of low household income in many Asian countries, More than 65% of customer base is in Prepaid. So most of the operators reduce their tariff to acquire new customers and that causes decreased ARPU, continuously about 3 percent during last 5 years in the region. In addition to tariff reduction, five countries (Singapore, Hong Kong, South Korea, Taiwan and Japan) in the region has introduced Mobile Number portability (MNP) in order to increase the market competition and improve service quality. Most of mobile customers are eager to own latest model of mobile phone so handset subsidies act as a powerful driver for users to switch from one network to another in countries like Japan, and South Korea.

Mobile operators have to understand the youth’s buying behavior to find out the reasons why they might switch services. Gain a true and timely view of the youth on what kind of products and pricing plans will make them stick to a particular brand, has a significant value in managing Churn effectively.

In the Asian region, highest churn rate is recorded in the Indian mobile market, which is around 42% per annum. Having lowest tariff rates to attract low income customers, there is a problem in maintaining ARPU at the same level but in such a challenging environment, some mobile operators are reporting healthy value added services revenue.

Currently average ARPU have fallen by 55 percent over the past four years. Nevertheless data APRU has grown by 45 % over the same period [2]. Basically that was done through aligning their values added services towards desires of the Indian consumers based on the simple principle of ABC – Astrology, Bolllywood and Cricket.

When developed countries like Japan is concerned, majority of customers are having post paid connections. So Intelligent systems are used by the operators to identify fraud/credit limit exceeds, take action against that immediately. Apart from that, centrally located blacklist is maintained. So no one will be able to switch to another operator having a huge outstanding with one operator. On the other hand, Mobile number portability allows to
customer to switch from one network to another having a same mobile number and this increases the competitiveness of the market.

Where Saudi Arabian mobile market is concerned, more than 93% of market is consists with prepaid connections. The typical feature that can be observed in Arabian markets is many promotion and loyalty schemes to retain their existing customers. Some of the benefits are listed below [2].

- Free voice minutes
- Free internet minutes
- Loyalty credit values
- Recharge bonus promotions,
- Special rates for countries on respective dates
- Special promotions on the high ARPU category as market is mainly on the international calls
CHAPTER 4 : Research Methodology

For the data gathering, the questionnaire survey method was used. A survey was carried out, using a questionnaire, evaluated across various demographic factors, to identify the main causes for retention or churn from one network in Sri Lankan context. Strategies that can be used to minimize churn rate were identified based on the feedback received for the questionnaire and by looking at the best practices available in the region. Finally a model was developed to prioritize the influencing factors (Tariff, Coverage, Brand, VAS and QoS) to measure the overall customer satisfaction in the Sri Lankan mobile industry context.

Below given are sequential activities carried out in order to achieve the task.

4.1 Sample Selection:

Selecting a suitable sample is a key important task a research. For this research, “Total active mobile subscribers in the country (Approx. 6 Million)” has been taken as the Target Population.

4.2 Calculating the sample size:

Equation

\[ s = \frac{ss}{1 + \frac{(ss - 1)}{pop}} \]

\[ ss = \frac{Z^2 p(1-p)}{c^2} \]

Where:

- \( Z \) = Z value for the relevant Confidence Level (CL)
- \( p \) = 0.5 for calculating the sample size
- \( c \) = Confidence Interval (CI)
- \( pop \) = population size

<table>
<thead>
<tr>
<th>CI</th>
<th>0.05</th>
<th>0.1</th>
<th>0.15</th>
<th>0.2</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>CL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To achieve a 90% confidence rating, + or - 5%, minimum 273 responses are required for the analysis. Stratified Sampling Technique is used as the sampling technique, in such a way that stratum (sample) represents each demographic attributes in the population.

### 4.3 Hypothesis

In statistical hypothesis testing two hypotheses are compared, which are called the null hypothesis and the alternative hypothesis. The null hypothesis is the hypothesis that states that there is no relation between the phenomena whose relation is under investigation, or at least not of the form given by the alternative hypothesis. The alternative hypothesis, as the name suggests, is the alternative to the null hypothesis, it states that there is some kind of relation.

2. Influencing factors for churn are same for various subscriber segments

### 4.4 Conceptual Model

To build a Conceptual Model to analyze Churn Management, it is required to identify the main aspects that affect Churn Management process and those factors may vary based on whether it happens voluntary or involuntary. Following is a diagrammatic representation of influencing aspects & alternative actions [2].
4.5 Questionnaire Design: Aspects and Variables

Following table explains the aspects focused in questionnaire design & the variables that can be used to measure the gravity of each aspect.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>VAS Usage – SMS, MMS, GPRS, E Channeling, etc.</td>
</tr>
<tr>
<td>Quality and Coverage -</td>
<td>Experience in disturbance/call drops</td>
</tr>
<tr>
<td>Service Level</td>
<td>Coverage</td>
</tr>
<tr>
<td>Price - Connection</td>
<td>Connection Type</td>
</tr>
<tr>
<td>attributes</td>
<td>Outgoing free</td>
</tr>
<tr>
<td></td>
<td>Payment responsible</td>
</tr>
<tr>
<td></td>
<td>Network stay</td>
</tr>
<tr>
<td>Price – Usage</td>
<td>Average Bill Amount</td>
</tr>
<tr>
<td></td>
<td>No of calls taken from mobile</td>
</tr>
<tr>
<td></td>
<td>No of calls received to mobile</td>
</tr>
<tr>
<td>Loyalty Scheme</td>
<td>Loyalty schemes</td>
</tr>
</tbody>
</table>
### 4.6 Transformation of each aspect in to the questionnaire

The focused aspects have to be represented by one or more questions in the questionnaire. Following tables represent Indicators & Measures of each variable used to measure the gravity of each aspect:

#### Technology

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAS - SMS</td>
<td>SMS Usage</td>
<td>Never, Rarely, Sometime, Most of the time, Every time</td>
<td>Category C Question 18</td>
</tr>
<tr>
<td>VAS - Others (MMS, GPRS, E Channeling, etc.)</td>
<td>Usage</td>
<td>Never, Rarely, Sometime, Most of the time, Every time</td>
<td>Category C Question 19</td>
</tr>
</tbody>
</table>

#### Quality and Coverage - Service Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience in disturbance/call drops</td>
<td>How often face the problem</td>
<td>Never, Rarely, Sometime, Most of the time, Every time</td>
<td>Category D Question 27</td>
</tr>
<tr>
<td>Coverage</td>
<td>Satisfaction about the coverage offered</td>
<td>Highly Dissatisfied, Dissatisfied, Neutral, Satisfied, Extremely Satisfied</td>
<td>Category D Question 25</td>
</tr>
</tbody>
</table>
### Price - Connection Attributes

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection Type</td>
<td>Postpaid or Prepaid</td>
<td>Postpaid / Prepaid</td>
<td>Category B Question 7</td>
</tr>
<tr>
<td>Availability of outgoing free minutes</td>
<td>Outgoing free minutes available or not</td>
<td>Yes / No</td>
<td>Category B Question 9</td>
</tr>
<tr>
<td>Payment responsible</td>
<td>Who does the payment</td>
<td>own/parent/employer</td>
<td>Category B Question 10</td>
</tr>
<tr>
<td>Network stay</td>
<td>No of years in the current network</td>
<td>less than 1 yr, between 1 yr and 3 yrs, between 3 yrs and 8 yrs</td>
<td>Category B Question 8</td>
</tr>
</tbody>
</table>

### Price - Usage

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage amount</td>
<td>Average No of calls received per day</td>
<td>less than 5, between 5 and 15, between 15 and 30, above 30</td>
<td>Category B Question 12</td>
</tr>
<tr>
<td>Usage amount</td>
<td>Average No of calls taken per day</td>
<td>less than 5, between 5 and 15, between 15 and 30</td>
<td>Category B Question 13</td>
</tr>
<tr>
<td>Usage amount</td>
<td>Average bill amount</td>
<td>less than 500, between 500 and 1000, between 1000 and 2500, between 2500 and 7500, above 7500</td>
<td>Category B Question 14</td>
</tr>
</tbody>
</table>

### Loyalty Scheme

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty schemes</td>
<td>Consideration about the loyalty points</td>
<td>Never, Rarely, Sometime, Most of the time, Every time</td>
<td>Category C Question 21</td>
</tr>
</tbody>
</table>

### Customer Service - Service Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given solutions for the complaints made</td>
<td>Satisfaction of the given solution</td>
<td>Highly Dissatisfied, Dissatisfied, Neutral, Satisfied, Extremely Satisfied</td>
<td>Category D Question 28</td>
</tr>
</tbody>
</table>
### Information given by the mobile operator

- **Satisfaction of the given information**
  - Highly Dissatisfied, Dissatisfied, Neutral, Satisfied, Extremely Satisfied

### Price – Purpose

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of requirement</td>
<td>Type of work used</td>
<td>Business/Personal/Both</td>
<td>Category A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 5</td>
</tr>
</tbody>
</table>

### Brand Image

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consideration on Brand Name</td>
<td>Level of Consideration</td>
<td>Very Low, low, Average, High, Very High</td>
<td>Category C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 16</td>
</tr>
<tr>
<td>Recommendation of current operator to a friend</td>
<td>How Frequently</td>
<td>Never, Rarely, Sometime, Most of the time</td>
<td>Category C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 17</td>
</tr>
</tbody>
</table>

### Level of importance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important for day to day activities</td>
<td>Level of importance</td>
<td>Very Low, low, Average, High, Very High</td>
<td>Category B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 11</td>
</tr>
<tr>
<td>Importance of Mobile Number</td>
<td>Level of importance</td>
<td>Very Low, low, Average, High, Very High</td>
<td>Category C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 22</td>
</tr>
</tbody>
</table>

### Credit Limit

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicators</th>
<th>Measures</th>
<th>Question(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit limit offered</td>
<td>Level of satisfaction for offered credit limit</td>
<td>Highly Dissatisfied, Dissatisfied, Neutral, Satisfied, Extremely satisfied</td>
<td>Category E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 31</td>
</tr>
<tr>
<td>Disconnect the connection due to non payment</td>
<td>Whether connection is disconnected or not</td>
<td>Yes / No</td>
<td>Category E</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Question 32</td>
</tr>
</tbody>
</table>
CHAPTER 5 : Survey Outcome

5.1 Initiation

Survey was conducted through a questionnaire. Questionnaire was distributed both in soft and hard copies in such a way that it covers all following demographic areas based on stratified sampling technique. SPSS and Microsoft EXCEL were used as software for the Data Analysis.

Following demographic factors were considered for the research:

i. Age
ii. Gender
iii. Highest Education Level
iv. Job Category
v. Work Place
vi. Monthly Income (Rs.)

5.2 Assignment of Numerical Values for the Demographic Factors

<table>
<thead>
<tr>
<th>Demographic Factor</th>
<th>Numerical Value Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>Less than 25 years</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
</tr>
<tr>
<td><strong>Highest Education Level</strong></td>
<td>Below O/L</td>
</tr>
<tr>
<td><strong>Job Category</strong></td>
<td>Student</td>
</tr>
<tr>
<td><strong>Work Place</strong></td>
<td>Government</td>
</tr>
<tr>
<td><strong>Monthly Income (Rs.)</strong></td>
<td>Less than 10,000</td>
</tr>
</tbody>
</table>

Table 5.1 : Assignment of Numerical Values for the Demographic Factors
5.3 Mean, Median, Mode and Standard Deviation of Responses

The responses for individual questions are converted into the numerical form and analyzed using Mean, Median, Mode and Standard Deviation.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>No of Responses</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>304 1</td>
<td>1.86</td>
<td>2</td>
<td>2</td>
<td>0.614</td>
</tr>
<tr>
<td>Highest Education Level</td>
<td>303 2</td>
<td>2.95</td>
<td>3</td>
<td>4</td>
<td>1.083</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>288 17</td>
<td>2.43</td>
<td>2</td>
<td>2</td>
<td>0.968</td>
</tr>
<tr>
<td>Type of work</td>
<td>304 1</td>
<td>1.59</td>
<td>1</td>
<td>1</td>
<td>0.893</td>
</tr>
<tr>
<td>Usage (No of calls taken and Received)</td>
<td>305 0</td>
<td>1.8</td>
<td>2</td>
<td>2</td>
<td>0.832</td>
</tr>
<tr>
<td>Average Bill amount/Usage</td>
<td>303 2</td>
<td>2.31</td>
<td>2</td>
<td>2</td>
<td>0.911</td>
</tr>
<tr>
<td>Satisfaction of current tariff</td>
<td>304 1</td>
<td>2.47</td>
<td>2</td>
<td>2</td>
<td>0.761</td>
</tr>
<tr>
<td>Frequently face call drops</td>
<td>304 1</td>
<td>2.47</td>
<td>2</td>
<td>2</td>
<td>0.761</td>
</tr>
<tr>
<td>Satisfaction about the coverage</td>
<td>303 2</td>
<td>3.38</td>
<td>4</td>
<td>4</td>
<td>0.924</td>
</tr>
<tr>
<td>Level of getting info about services</td>
<td>283 22</td>
<td>3.44</td>
<td>4</td>
<td>4</td>
<td>1.055</td>
</tr>
<tr>
<td>Level of consideration about brand name</td>
<td>304 2</td>
<td>3.39</td>
<td>4</td>
<td>4</td>
<td>0.996</td>
</tr>
<tr>
<td>Level of Importance</td>
<td>304 1</td>
<td>3.82</td>
<td>4</td>
<td>4</td>
<td>0.977</td>
</tr>
<tr>
<td>SMS Usage</td>
<td>304 1</td>
<td>3.48</td>
<td>4</td>
<td>4</td>
<td>1.102</td>
</tr>
<tr>
<td>Other VAS Usage</td>
<td>303 2</td>
<td>2.14</td>
<td>2</td>
<td>1</td>
<td>1.058</td>
</tr>
<tr>
<td>Satisfaction of information received</td>
<td>281 24</td>
<td>3.08</td>
<td>3</td>
<td>3</td>
<td>0.945</td>
</tr>
<tr>
<td>Concern regarding the loyalty Points</td>
<td>270 35</td>
<td>2.23</td>
<td>2</td>
<td>3</td>
<td>0.747</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>301 4</td>
<td>3.64</td>
<td>4</td>
<td>4</td>
<td>0.719</td>
</tr>
<tr>
<td>Level of consideration about the Call Chargers</td>
<td>266 39</td>
<td>4.33</td>
<td>5</td>
<td>5</td>
<td>0.917</td>
</tr>
<tr>
<td>Level of consideration about the QOS</td>
<td>264 41</td>
<td>4.16</td>
<td>4</td>
<td>5</td>
<td>0.951</td>
</tr>
<tr>
<td>Level of consideration about the Brand</td>
<td>259 46</td>
<td>3.36</td>
<td>3</td>
<td>3</td>
<td>1.042</td>
</tr>
</tbody>
</table>
### Table 5.2: Mean, Median, Mode and Standard Deviation of Responses

<table>
<thead>
<tr>
<th>Level of consideration</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>about the VAS</td>
<td>262</td>
<td>43</td>
<td>3.4</td>
<td>3</td>
</tr>
<tr>
<td>about the No of Outgoing Free minutes</td>
<td>264</td>
<td>41</td>
<td>4.3</td>
<td>5</td>
</tr>
<tr>
<td>about the Coverage</td>
<td>263</td>
<td>42</td>
<td>4.33</td>
<td>5</td>
</tr>
<tr>
<td>about the Monthly rental</td>
<td>262</td>
<td>43</td>
<td>4.08</td>
<td>4</td>
</tr>
</tbody>
</table>

5.4 Analysis

When distribution of package type is concerned in the sample, prepaid is more popular among younger generation. On the other hand postpaid packages are more popular among middle age people.
Apart from that, when postpaid and prepaid distribution is concerned against the purpose they are used, most of the customers tend to go for a postpaid package if they use the connection for their business activities as well.

When distribution of average bill is concerned, it lies between Rs.500 and Rs.1000 both in prepaid and postpaid. But when we compare the postpaid and prepaid distribution, average
usage of postpaid customers is comparatively higher than average usage of prepaid customers.

When customer satisfaction against usage is concerned, if average usage is between 500 and 2500, majority of customers are not satisfied with their current tariff plan. So we can say if better tariff plan is introduced by competitor for the customers with an average usage, there is a tendency of switching to that network.
Figure 5.6: Breakdown of satisfaction on current call charges with average usage

When outgoing free minutes are available, 68% of the customers are satisfied with their current tariff.

Figure 5.7: Satisfaction with outgoing free minutes

According to the survey results, only 40% care about the brand image when their mobile network is selected.
Figure 5.8: Level of consideration about the brand name

But if consideration of brand name is high, customers tend to recommend present connection to a third party. So we can say if operators invest heavily to increase the power of brand, there is a positive impact for the acquisition of new customers.

Figure 5.9: Recommendation of current operator to a third party Vs Level of consideration about the brand name
More than 77% of customers say that mobile is important for their day to day activities. So we can say mobile has become an indispensable feature among the Sri Lankan mobile subscribers.

On the other hand, more than 45% of customers consider their mobile number as unique identification for them. If mobile number portability is allowed in Sri Lankan context, there will be an impact on churn rate.
If customers use their mobile connection for their business work, about 72% of customers consider there is high importance of mobile number.

![Pie chart showing level of importance of mobile number](image)

**Figure 5.12 : Level of importance of mobile number if they used the connection for a business**

Apart from that, if customer remains in the network for a long time, he does not like to change his existing mobile number.
Figure 5.13: Level of importance of mobile number with network stay

SMS is more popular among the younger generation. So operators can offer special tariff for SMS when they target to attract younger generation for a package.
Figure 5.14: Variation of SMS usage with age
CHAPTER 6 : Discussion of Findings

6.1 Possibility of Retaining the Customers without Churn

Out of 303 respondents, only 122 customers had a mobile connection prior to the present connection. From that, 68 % of the customers believe that previous mobile operator had the opportunity to retain him in the previous network.

Based on the research output, major reasons for churn are call charges (40 %), coverage (21 %) and Number of outgoing free minutes (18 %). Since the Sri Lankan market is highly price sensitive, considering the above 3 factors to manage Churn is highly important. It can be observed that these 3 factors are common for the customers in the regional countries [2]. When analyzing the current packages offered by the Sri Lankan operators, seems these factors have already been identified by most of the operators for a greater extend.
6.2 Methods to Minimize Churn based on Customer Feedback

(i) **Provide more benefits to long stay customers**

It is necessary to enhance benefits to the customers based on their network stay. But according to the survey results, only 58% of customers, who are at the same network more than 3 years, are having connections with outgoing free minutes.

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**Figure 6.2:** Reasons for churn

**Figure 6.3:** Outgoing free minutes availability for long stay customers
(ii) **Reasonable charges without any hidden costs**

Most of the time customers do not have proper idea about the tariff of package they are using. Therefore, it is necessary to make the customer aware of the charges applied for their mobile connection and it is better to provide a detailed bill without any additional cost. According to the survey results, less than 60% of customers are satisfied about the information provided regarding the services, by the operator.

![Figure 6.4: Level of satisfaction regarding information provided for services](chart.jpg)

(iii) **Consideration of customer feedback when coverage is expanded**

More priorities should be given to the areas with higher complaint rates are observed and it is very useful to maintain proper systems to gather customer information precisely.

(iv) **Awareness of Customer Service Officers about the Services and Technology**

Customer Service Officers and Call Center Staff should be properly trained about the existing services. They should identify customer requirement properly and should be able to provide correct answers based on their requirements. Apart from that whenever customer is contacted, better to select the most convenient language to contact the customer.
otherwise inconvenience may be caused. Based on the survey results, from those who have made complaints, only 19% have satisfied.

![Figure 6.5: Level of satisfaction regarding complaint made](image)

(v) Give opportunity to do payments in installment basis

When there is a huge outstanding bill amount and customer does not have ability to settle it due to a genuine/acceptable reason, better to give a chance to the customer to settle the bill in installments. Currently this type of flexibility is offered by almost every Sri Lankan operator, but customers are not aware of this type of flexibilities. This happens due to existing gap between customer and operator.

6.3 VAS against Churn

Value Added Services used by foreign mobile operators, to strengthen stickiness between customer and operator, are designed in such a way that it is important to customer’s day to day life. According to the input received from survey, about 54% of customers who do not use VAS services, say there is no importance for day to day activities from available Value Added Services.
Figure 6.6: VAS usage

Figure 6.7: Reasons for low VAS usage

Majority of Sri Lankan mobile users use their mobile only for Voice and SMS. So it is a challenge to a mobile operator to design Value Added Services in such a way that it is aligned to customer requirements. On the other hand, it is necessary to make customers aware of the available Value Added Services as most customers are not satisfied about information they receive from the operators about the Value Added Services.
Additional services subscribers expect from the operators

1. Rental of connection should be reduced with the network stay
2. Wider 3G service coverage
3. Roaming facility and IDD chargers to be reasonable
4. Easy way to obtain the service & setting up the phone for GPRS & MMS
5. Provide same facilities available to post paid customers to pre paid customers as well
   (eg: Missed Call Alerts, 3G, Black Berry)
6. Additional chargers for activation of VAS should be removed
7. Allow internal package changes with out any charges
8. Fast internet access with a low tariff through GPRS

6.4 Introduction of Loyalty Programs

In telecommunication environments, loyalty programs are required to retain the existing customer in the network. But in Sri Lankan environment loyalty program concepts is new to customers according to the survey results. This happens mainly due to operators do not design loyalty schemes in such a way that benefits are visible to customers. Based on the survey results only 16% of the customers give importance about the loyalty points and 24% of the customers do not give importance to the loyalty schemes in mobile operators.

![Figure 6.8: Consideration about the loyalty schemes](image)

Figure 6.8 : Consideration about the loyalty schemes
According to the survey results, this is basically happening due to lack of awareness about the loyalty points by operators. From the customers who do not give importance to the loyalty schemes, 45% of customers say that they do not care about the loyalty points. But if mobile operators can offer outgoing free minutes, free SMSs or credit upgrades instead of loyalty points, these schemes may be more effective as Sri Lankan market is highly price sensitive.

![Figure 6.9: Reason for not considering about the loyalty schemes](image)

**6.5 Hypothesis Testing**

From the questions in the questionnaire, impact of following factors for churn from one network to another was concerned. 

- QoS (Quality of Service)
- VAS (Value Added Services)
- No of outgoing free minutes
- Monthly Rental
- Coverage
In the above graphs it can be clearly observed that the bubbles are scattered towards higher values in Tariff Rates & Coverage, compared to VAS. Therefore it can be stated that “Tariff Rates and Coverage” effects for churn from a network than “QoS and VAS” of the operator in Sri Lankan Context.
CHAPTER 7: Conclusion and Recommendations

Due to profound competition, controlling churn rate has become a challenge to Sri Lankan Mobile Operators. In this regard it is of paramount importance that the operators manage churn, as without proper churn management strategies, they will not be able to retain the market share. The main reasons for churn were identified after analyzing customer expectations and behavior patterns through this research.

Based on literature survey & research outcomes, it can be stated that Sri Lankan subscribers are highly price sensitive and majority of customers who have churned from one network to another is due to lower tariff rates offered by the latter.

Further, it can be identified that features for different packages are not being properly directed to a target audience or a segment. Therefore, it is necessary to build new products or packages after cautious analysis of interests of different segments.

eg. As most of the younger people prefer to use SMS, special packages can be introduced with low tariff for SMS.

It is also vital to give more benefits to existing customers considering their network stay.

eg. Number of outgoing free minutes can be increased considering number of years in the network.

On the other hand, majority of mobile subscribers use value added services very rarely. It is a big challenge to Sri Lankan mobile operators to align their value added services with culture, attitudes and values of Sri Lankan people. But, however, they should educate customers about the available value added services and they must use different strategies to promote existing value added services. Meanwhile, it is necessary to align all discounts, loyalty programs, promotions with financial benefits to customers. Otherwise it is difficult to attract attention of customers due to nature of the Sri Lankan market.

eg. If a customer recharges the card with a Rs.1000 card, if the operator can assign bonus Rs. 200, customer tends to go for Rs.1000 card as there is an explicit benefit.
From the operators’ point of view, they need to provide special attention to most profitable customers, as if they can retain them the impact of churn can be minimized. As most disconnections are caused by non payment, it is necessary to allocate special discounts for paymasters to encourage timely payments. Finally if proper churn management policies are available in the Sri Lankan mobile market it will help increase the customer satisfaction while minimizing losses incurred by mobile operators due to bad debts and acquisition costs.

7.1 Issues and Challenges

Non availability of comprehensive literature on this topic both in Sri Lankan and Asian region context was a difficulty faced in carrying out this research. But it was overcome by referring literature on European & American regions & adapting suitably in to the Sri Lankan context.
References


Annexure

9.1 Survey Questionnaire

**Questionnaire on Proactive Churn Management in Sri Lankan Mobile Telecommunication Industry**

Dear Sir / Madam,

I'm conducting a survey to identify the proactive measures that can be taken by the Sri Lankan Mobile Telecommunication Operators to minimize Churn. This research is a part of MEng Post Graduate Degree program conducted by the University of Moratuwa.

I assure you that your responses will be kept strictly confidential and will only be used in the data analysis in my research project. The overall results of the study will focus on Sri Lankan Mobile Telecommunication Industry as a whole, and will not focus on each university or company separately. For statistical validity, it will be much appreciated if you could respond to all the questions in this survey.

Please e-mail me your responses as soon as you can to:

sunethg@graffiti.net

Thanks in advance.

Suneth Gamage

Instructions:

- Questions should be answered by clicking & selecting ("X") the appropriate check box.
- Please feel free to express your comments in the provided space (if any).
### Category A : GENERAL INFORMATION

1. Name

2. Gender
   - [ ] Male
   - [ ] Female

3. Age
   - [ ] Less than 25 years
   - [ ] Between 25 and 40 years
   - [ ] Between 40 and 60 years
   - [ ] Above 60 years

4. Work Place
   - [ ] Government
   - [ ] Private
   - [ ] Semi Government
   - [ ] Self Employed
   - If not, please specify

5. Job Category
   - [ ] Student
   - [ ] Business
   - [ ] Non Executive
   - [ ] Executive
   - If not, please specify

6. Monthly Income (Rs.)
   - [ ] Less than 10,000
   - [ ] Between 10,000 and 25,000
   - [ ] Between 25,000 and 50,000
   - [ ] Between 50,000 and 100,000
   - [ ] Between 100,000 and 200,000
   - [ ] Above 200,000
Category B : INFORMATION ON CURRENT MOBILE CONNECTION

7. Connection Type

- Postpaid
- Prepaid

8. How long have you been using the current mobile connection?

- Less than 1 yr
- Between 1 and 3 yrs
- Between 3 and 8 years
- More than 8 years

9. Does your connection has Outgoing Free Minutes?

- Yes
- No

If Yes, please specify No. of Outgoing Free Minutes

10. What is the main purpose you use the mobile phone?

- Personal
- Business
- Both

11. What is the level of importance of mobile phone for your day to day activities?

- Very low
- Low
- Average
- High
- Very High

12. Average number of incoming calls per day

- Less than 5
- Between 5 and 15
- Between 15 and 30
- Above 30
13. Average number of outgoing calls per day

- [ ] Less than 5
- [ ] Between 5 and 15
- [ ] Between 15 and 30
- [ ] Above 30

14. Average Monthly Bill (Rs.) (If Prepaid, Average Monthly Usage)

- [ ] Less than 500
- [ ] Between 500 and 1000
- [ ] Between 1000 and 2500
- [ ] Between 2500 and 7500
- [ ] Above 7500

15. Are you satisfied with the current call charges offered to you for the current mobile connection?

- [ ] Highly dissatisfied
- [ ] Dissatisfied
- [ ] Neutral
- [ ] Satisfied
- [ ] Extremely satisfied

Category C: BRAND IMAGE AND TECHNOLOGY

16. When you selected your mobile operator, what was the level of consideration about the brand name?

- [ ] Very low
- [ ] Low
- [ ] Average
- [ ] High
- [ ] Very High

17. Are you recommending to another party (friend, relation, etc.) to take a new mobile connection from your current mobile operator?

- [ ] Never
- [ ] Rarely
- [ ] Some time
- [ ] Most of the time
- [ ] Every time
18. Are you using Short Message Services (SMS) Frequently?

- Never
- Rarely
- Some time
- Most of the time
- Every time

19. Are you using other Value Added Services (GPRS, MMS, Ring in Tones, Mobile TV, etc.) Frequently?

- Never
- Rarely
- Some time
- Most of the time
- Every time

19.1 If you are using other Value Added Services, please rank (1-3) the services by usage.

- GPRS
- MMS
- PRBT (ring-in tone)
- Mobile TV
- News alerts
- Other (please specify)

19.2 If not, please specify the reason for not to use offered services.

- Cost
- Lack of knowledge
- Not important for my day to day work
- Phone does not support

Other (please specify)

20. Are you satisfied on information given to you regarding Value Added Services (GPRS, MMS, Ring in Tones, Mobile TV, etc.) by your operator?

- Highly dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Extremely satisfied
21. Do you give importance / consideration to the Loyalty Points awarded?

- Yes
- Neutral
- No

21.1 If not, please specify the reason.

- No proper understanding about the scheme
- There is no value behind that
- Do not care about the Loyalty Points
- Other (please specify)

22. Do you consider your present mobile number being an important identity for you?

- Very low
- Low
- Average
- High
- Very High

23. Overall what is the level of satisfaction on present connection?

- Highly dissatisfied
- Dissatisfied
- Neutral
- Satisfied
- Extremely satisfied

24. If any chance if you wish to join any other Mobile Network, the level of consideration of following factors.

<table>
<thead>
<tr>
<th></th>
<th>Very Low</th>
<th>Low</th>
<th>Neutral</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call Charges</td>
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</tr>
<tr>
<td>Quality of Service</td>
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<tr>
<td>Brand</td>
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<tr>
<td>VAS (Value Added Services)</td>
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</tbody>
</table>
Category D : SERVICE LEVEL OFFERED (QUALITY of SERVICE)

25. Are you satisfied with the coverage offered by your operator?

- [ ] Highly dissatisfied
- [ ] Dissatisfied
- [ ] Neutral
- [ ] Satisfied
- [ ] Extremely satisfied

26. Are you getting required information about the services offered by your operator?

- [ ] Never
- [ ] Rarely
- [ ] Some time
- [ ] Most of the time
- [ ] Every time

27. How frequently do you experience any disturbance / call drops when generating calls?

- [ ] Never
- [ ] Rarely
- [ ] Some time
- [ ] Most of the time
- [ ] Every time

28. Have you made any complaints regarding service to operator?

- [ ] Yes
- [ ] No
28.1 If Yes, Are you satisfied with the given solution and resolution speed given by the Operator?

- [ ] Highly dissatisfied
- [ ] Dissatisfied
- [ ] Neutral
- [ ] Satisfied
- [ ] Extremely satisfied

Category E: MOBILE CONNECTION HISTORY

29. Have you used a connection with any other mobile operator prior to the current connection?

- [ ] Yes
- [ ] No

29.1 If Yes, What were the main reasons to drop the previous operator?

(Rank 1-3)

<table>
<thead>
<tr>
<th>Reason</th>
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<tbody>
<tr>
<td>Call Charges</td>
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<tr>
<td>Quality</td>
</tr>
<tr>
<td>Brand</td>
</tr>
<tr>
<td>Value Added Services offered</td>
</tr>
<tr>
<td>Coverage</td>
</tr>
<tr>
<td>Disconnected due to non payment</td>
</tr>
<tr>
<td>Bad Customer Service</td>
</tr>
<tr>
<td>No of Outgoing Free Minutes</td>
</tr>
<tr>
<td>Rental</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

29.2 If Yes, What are the main reasons to select the current operator?

(Rank 1-3)

<table>
<thead>
<tr>
<th>Reason</th>
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<tbody>
<tr>
<td>Call Charges</td>
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<td>Quality</td>
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<td>Value Added Services offered</td>
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<td>No of Outgoing Free Minutes</td>
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<tr>
<td>Rental</td>
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<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>
29.3 If Yes, Do you think that the previous mobile operator had the opportunity to retain you in the network?

☐ Yes
☐ No

29.4 If Yes, How would it be?


30. Please specify the additional services you expect from the current mobile operator?


Below questions are only for Postpaid connections:

31. Are you satisfied with the credit limit (maximum outstanding credit amount allowed without disconnecting) offered to you?

☐ Highly dissatisfied
☐ Dissatisfied
☐ Neutral
☐ Satisfied
☐ Extremely satisfied

32. Have your connection ever got “outgoing barred” or “temporary disconnected” due to non payment?

☐ Yes
☐ No

33. Any suggestions to design policies to minimize inconvenience caused due to outgoing barred or temporary disconnected by due to credit limit exceed?


Thank you for your valuable time in filling this questionnaire!