



UNIVERSITAS INDONESIA

**IMPORTANT FACTORS IN DRIVING CONSUMERS
PREFERENCE TOWARDS SIM CARD**

THESIS

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**FACULTY OF ECONOMICS
MAGISTER OF MANAGEMENT
JAKARTA
JULY 2010**



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**Submitted to fulfill one of the requirements to obtain degree of
Magister Management**

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**FACULTY OF ECONOMICS
MAGISTER OF MANAGEMENT
MASTER OF BUSINESS INTERNATIONAL
JAKARTA
JULY 2010**

STATEMENT OF ORIGINALITY

This final paper represents my own effort,
Any idea or excerpt from other writers in this final paper, either in form of
publication or in other form of publication, if any, have been acknowledged in this
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PREFACE

Praise and thanks to Allah SWT because of His grace and guidance, researcher acquire guidance and strength to finalize this thesis. This paper still has many shortcomings and to that end researcher would like to ask forgiveness when there are less acceptable manners during the process of settlement of this writing. On this occasion researcher would like to say gratitude to:

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2. Dr. Adi Zakaria Afiff, as thesis advisor who has been willing to provide his time and share his knowledge for this thesis.
3. Dr. Tengku Ezni Balqiah, as thesis examiner.
4. Dr. Nurdin Sobari, as thesis examiner.
5. My family for their affection, prayers and never ending support.
6. Friends and colleague for their support and understanding.

Furthermore researcher hope this study can provide scientific contributions to anyone who reads and needs it. Suggestions and constructive criticism as an input for enhancements and improvements for the next writing are welcome.

Jakarta, 7 July 2010

Muhammad Saffianto

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ABSTRACT

Name :Muhammad Saflianto
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CONSUMERS PREFERENCE TOWARDS SIM
CARD**

This thesis analyzed important factors in driving consumer preference toward SIM card brand. To understand what factors drive SIM card brand choice, the thesis analyzed two association importances: stated importance and derived importance. While stated importance was calculated by asking consumers directly what characteristic is important to them, derived importance was calculated by using Jaccard Similarity Coefficient. Good network quality, cheaper SMS tariff, and cheaper voice call rates were deemed as the most important factors in driving consumer preference toward SIM card brand. Different factors were obtained among different age group, and among GSM and CDMA users.

Key Words:

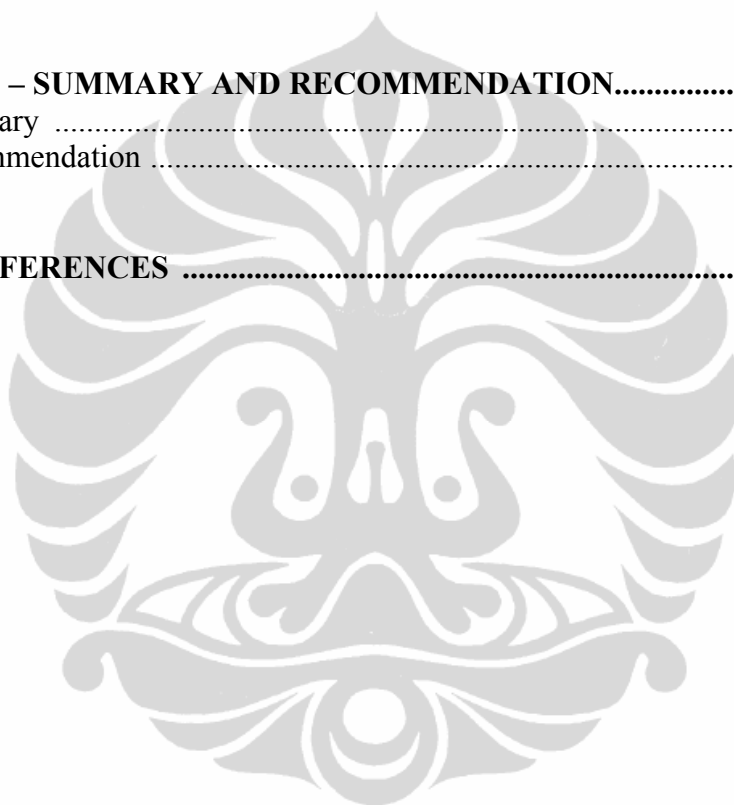
SIM card, stated importance, derived importance, Jaccard Similarity Coefficient.

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CHAPTER 1

INTRODUCTION

1. 1. Background.

For every country in the world, telecommunication industry is very important in boosting economic growth since information and communication played strategic role in facilitating development of other industrial sectors. In Indonesia there was only one company, Telkom (one of the state companies owned by government), used to monopolize telecommunication industry in Indonesia since 1960s until late 1980s. With the needs of fast growing information from all over the world, demand for telecommunication service kept increasing and Telkom alone could not handle all the demands from consumer. Not until 1989 when an updated law on telecommunication industry, No. 3/1989 was made effective, replacing the law No. 5/1964, where private companies were able to operate in telecommunication industry in Indonesia, beside Telkom. The Indonesia government continued to adjust the regulation on telecommunication industry to cope with the fast growing industry.

As time goes by, rapid improvements in technology have made it feasible for a wireless telephone to be a substitute product for conventional fixed line telephone. One of the most popular wireless telephone is mobile phone. Mobile phone is much more popular than a fixed line telephone since it has no wires and highly mobile. As a result, fixed line telephone demand is sluggish, if not in declining trend. This is true for all market around the world, including in Indonesia.

In Indonesia, there are two operation systems of mobile phone, which are GSM (Global System for Mobile communication) and CDMA (Code Division Multiple Access). GSM is a digital communications technology that is widely operated and developed in Europe while CDMA is widely operated and developed in North America. GSM has an advantage in terms of wider network coverage while CDMA relies on cheaper rates.

In order to operate, a mobile phone requires a Subscriber Identity Module card (SIM card). A SIM card contains a unique serial number, security

authentication, and ciphering information, temporary information related to the local network and a list of the services the user has access to (Paul Wise, 2008). In some countries, a mobile phone is locked to its SIM card operators. It usually happens in countries where mobile phones are heavily subsidized such as United States and England. In Indonesia, there are two kinds of subscription plan: pre paid and post paid. According to all operators quarterly report as per December 2009, more than 95% of SIM cards sold in Indonesia are pre paid SIM card. They are sold freely without any strict contract agreement with mobile phone operators. Consequently, the users can easily switch networks by simply replacing the SIM card of one network with that of another while using only one mobile phone. This is typical, for example, among users who may want to optimize their cost by utilizing different tariffs to communicate with different counterparties on different networks. Following is the list of SIM card brands in Indonesia:

Table 1.1. List of SIM Card Brands in Indonesia

System	Company Name	Brand	Subscription Plan
GSM	Telkomsel	Kartu Halo	Post Paid
		Simpati	Pre Paid
		Kartu As	Pre Paid
	Indosat	IM3	Pre Paid
		Matrix	Post Paid
		Mentari	Pre Paid
	Excelcomindo	XL	Pre Paid and Post Paid
	Natrindo Telepon Selular	Axis	Pre Paid and Post Paid
Hutchison CP Telecommunication	Tri (3)	Pre Paid and Post Paid	
CDMA	Telkom	Flexi	Pre Paid and Post Paid
	Indosat	Star One	Pre Paid and Post Paid
	Bakrie Telecom	Esia	Pre Paid and Post Paid
	Mobile 8	Fren	Pre Paid and Post Paid
		Hepi	Pre Paid and Post Paid
Smart Telecom	Smart	Pre Paid and Post Paid	

Source: Processed by the Researcher

Telkomsel is the market leader with market share over 40%. Indosat and XL are in the next position with market share of 17% and 16% respectively. Those 3 major players' share counted about 75% of the total category share. The market share of each SIM card brand in Indonesia as per December 2009 was as follows:

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Table 1.2. Market Share of SIM Card Brands in Indonesia

Operator	Market share
Telkomsel (Kartu Halo, Simpati, Kartu As)	42.7%
Indosat (IM3, Matrix, Mentari, Star One)	17.2%
XL	16.2%
Flexi	8.2%
Esia	5.7%
Tri (3)	4.4%
Axis	2.6%
Smart	1.6%
Fren	1.3%

Source: All operators' quarterly report as per December 2009

Mobile phone users expand very rapidly in Indonesia, placing the country as the fourth largest market in Asia after South Korea, China, and Japan. According to quarterly report by all telecommunication service operators in Indonesia, the number of active numbers reached 189 million in December 2009. Considering the dual users (people who use more than 1 number), the number of mobile phone users were predicted about 160 million. The figure shows that mobile phone penetration already reached about 65% from Indonesia's total population.

Table 1.3. Number of Mobile Phone Subscribers

Year	Number of subscribers (in million)	Growth
2002	11.3	-
2003	18.5	64%
2004	30.7	66%
2005	49.2	60%
2006	63.9	30%
2007	96.4	51%
2008	160	66%
2009	189	18%

Source: All operators' quarterly report.

After experiencing booming period in 2002-2008 periods, the growth of mobile phone users slowed down in 2009. It was related to the fact that already

65% Indonesians owned a mobile phone. So the competition now is allied in acquiring remaining population that still did not use a mobile phone, and at the same time grabbing competitors' share. In order to do so, operators must improve their competitiveness relative to the competitors.

Nearly all operators translate competitiveness into low price. Often we see that operators seek to undercut each other in tariff to grab higher market share, sometimes by insulting other competitors' advertising campaign. The continuous activities lead to tariff war that already happened since year 2007. However, the association of cellular telephone companies (ATSI) refused to call the competition as a tariff war. The operators only wanted to provide more attractive and cheaper tariffs, it said.

1. 2. Problem Definition.

Nowadays we can observe that nearly all mobile phone operators are focusing on price/ tariff in order to attract consumers using their SIM card. However, is it true that tariff is the most important factors that are sought by consumers? If yes, which tariff, is it tariff for voice call, tariff for SMS, or tariff for internet access? If not about tariff, what is the most important thing that is sought by consumers? Is it about network, distribution, or other things?

1. 3. Research Objectives.

The objectives of the research are:

1. To understand the most important factors in selecting SIM card.
2. To understand the most important factors in selecting SIM card amongst different gender.
3. To understand the most important factors in selecting SIM card amongst different age group.
4. To understand the most important factors in selecting SIM card amongst different social class (SES).
5. To understand the most important factors in selecting SIM card amongst GSM users and CDMA users.

6. To understand the strength and weakness of major mobile phone operators in Indonesia.

1. 4. Paper Organization.

The paper consists of six different chapters:

Chapter 1: Introduction

This chapter explains background, problem definition, research objectives, and paper organization.

Chapter 2: Literatures Review

This chapter discusses theories, concepts, and previous research result that help this paper to be more systematic.

Chapter 3: Industry Profile

This chapter explains the overall industry profile, major players in the market, and current market situation.

Chapter 4: Research Method

This chapter explains the research method used, also source of data.

Chapter 5: Analysis of Findings

This chapter explains the findings and interpretations of the research result.

Chapter 6: Summary and Recommendation

This chapter consists of summary and recommendation of the important factors in selecting SIM card.

CHAPTER 2

LITERATURES REVIEW

2. 1. Role of Marketing in Business.

The tasks of crafting and executing company strategies are the heart and soul of managing a business enterprise and winning in the marketplace (Thompson, Strickland, Gamble, 2009). A company's strategy is a tool to monitor market situation, conduct its operations, compete successfully, and achieve organizational objectives. The important factor in a company's strategy is to build and strengthen the company's long term competitive position and financial performance and, gain competitive advantage over competitors that can help company achieving above normal profitability.

The most important aspect of a company's business strategy is its approach in competing and winning the marketplace (Gamble and Thompson, 2009). It is extremely important that a company's strategy strengthen its long term competitive position and allow it to gain competitive position over competitors. Four proven strategic approaches to setting a company apart from competitors and winning a sustainable competitive advantage are (Gamble and Thompson, 2009):

- Developing cost-based advantage. Achieving lower cost than competitors can produce a sustainable competitive position because lower costs allow a company to underprice competitors or earn larger profit margins than competitors.
- Creating a differentiation-based advantage. Differentiation can be applied in to several different strategies. Companies such as Harley-Davidson, Chanel, Rolex, and BMW have achieved competitive advantage by building their brands on higher quality, a distinctive image, attractive styling, or superior engineering.
- Focusing on a niche market within an industry. Many companies have developed a competitive advantage by serving the special needs and tastes on only a small segment of an industry's buyers rather than attempting to appeal all consumers in an industry.

- Developing unmatched resource strengths and competitive capabilities. Very often, winning a durable competitive position over competitors lie more on building competitively valuable resource strengths and capabilities than it does on having a distinctive product. Clever competitors can nearly always copy the features of a popular product, but it's much more difficult for competitors to match experience, know-how, or specialized resources that a company has developed and perfected over a long period of a time.

One of the most important factors in achieving those competitive advantages is proper implementation of marketing strategy. Marketing itself is really an ethos – a type of thinking that must flow throughout the company (Russell-Jones and Fletcher, 2009). Marketing is also subset of the organizational strategy and as such assists in meeting the objectives of the organization by ensuring that products and services are sold to the right market at the right price.

2. 2. Marketing Philosophy.

Many people think that only large companies operating in highly developed economies use marketing, but marketing actually occurs in small and large organizations, both inside and outside the business sector, and in all kind of countries. Marketing also has become a major component in the strategies of any organizations including nonprofit organizations and government. Also, marketing is a very important aspect in business since it contributes greatly to the success of the organization as production and distribution depend largely on marketing.

What is marketing actually? Marketing is a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others (Kotler, 2009). American Marketing Association (AMA) defined marketing as the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. The Chartered Institute of Marketing defined marketing as the management process responsible for identifying, anticipating and satisfying customer requirements profitably.

The most basic concept underlying marketing is that of human needs. A human need is a state of felt deprivation. Human could have many complex needs. When a need is not satisfied, a person will do one of two things – look for an object that will satisfy it or try to reduce the need. Need is the not the same with wants. Human wants are the form taken by human needs as they are formed by culture and individual personality. People have almost unlimited wants but limited resources. Thus, people want to choose products that provide the most satisfaction for their money. When supported by buying power, wants become demands. Given their wants and resources, people choose the product with the benefits to achieve the most satisfaction.

People satisfy their needs and wants with products. A product is anything that can be offered to a market to satisfy a need or want (Kotler, 2009). The concept of product is not limited to physical objects – anything capable of satisfying a need can be called a product. Marketers often use the expressions goods and services to distinguish between tangible and intangible products. Consumers usually face a broad range of products that might satisfy a particular need. Consumers make buying choice based on their perception of a product's value. Consumers will choose the product that gives the most benefit at the minimum cost.

Marketing occurs when people decide to satisfy needs and wants through exchange. Exchange is the act of obtaining a desired object from someone by offering something in return (Kotler, 2009). Some people also called exchange as barter. Exchange is one of ways that people can obtain a desired object. Exchange is the core concept of marketing. For an exchange to take place, several conditions must be satisfied. At least two parties must participate and each must have something of value in the exchange. Each party must also want to deal with other party and each must be free to accept or reject the other's offer. Finally, each party must be able to communicate and deliver. While exchange is the core concept of marketing, a transaction is the marketing's unit of measurement. A transaction consists of a trade of values between two parties. In a transaction, we must be able to say that one party gives X to another party and gets Y in return. Transaction marketing is part of the larger idea of relationship marketing. Smart

marketers work at building long-term relationship with valued customers, distributors, dealers, and suppliers.

The concept of transactions leads to the concept of a market. A market is the set of actual and potential buyers of a product (Kotler, 2009). Market is helpful to reduce the total number of transactions needed to achieve a particular volume of exchange. Nowadays, markets need not to be in physical locations. With modern communications and transportation mode, a seller can easily advertise a product on television or radio or internet website; receive orders from phone calls or from email, and the sellers mail the goods to consumer via airmail without any face to face communication.

The concept of markets finally brings us full circle to the concept of marketing. Marketing means working with markets to bring about exchange for the purpose of satisfying human needs and wants.

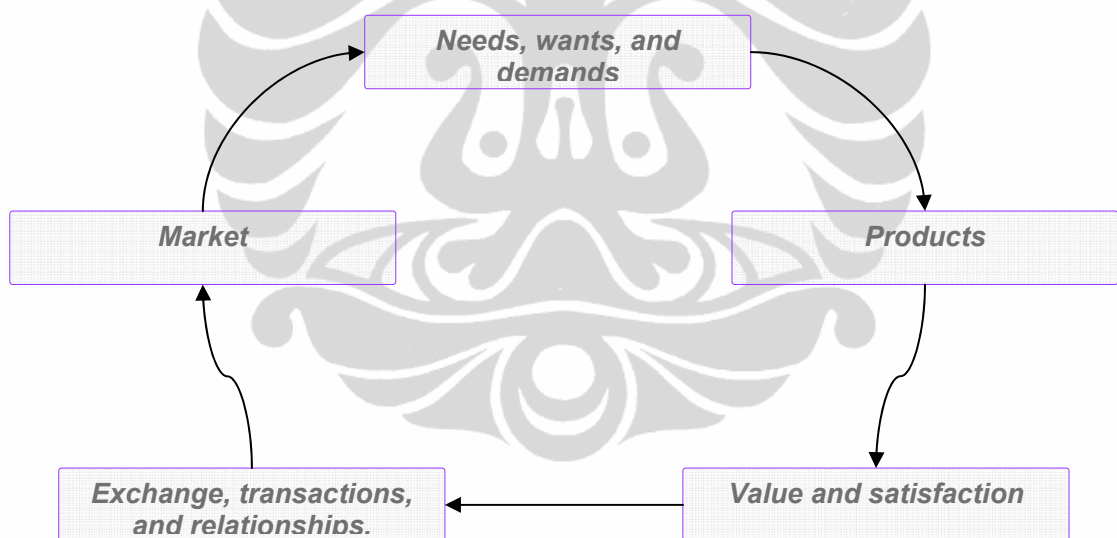


Figure 2.1. Core Concept of Marketing

Source: Kotler, Philip, "Marketing Management", 2009, Prentice Hall, p. 6

2. 3. Consumer Behavior.

One definition of consumer behavior is the study of the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires (Solomon, 2009). The study of consumer helps firms and organizations improve their marketing strategies by understanding issues such as how consumers think, feel, reason, and select between different alternatives (i.e. brands, products, services). In addition, it also helps marketers improve their marketing campaigns and marketing strategies to be more effective in reaching the consumers. Consumer response is the ultimate test of whether a marketing strategy is successful or not. Thus, a marketer should incorporate knowledge about consumers into every facet of a successful marketing plan (Solomon, 2009). Data about consumers help organizations to define the market and recognize threats and opportunities for a brand.

From an individual consumer's point of view, some purchase decisions are more important than others. High-involvement purchases involve goods or services that are psychologically important to the buyer because they address social or ego needs and therefore carry social and psychological risks (Mullins and Walker, 2010). High-involvement purchases may also involve high cost. Because a consumer's level of involvement with a particular purchase depends on the needs to be satisfied and the resources available, a high-involvement product to a consumer may be a low-involvement to other consumer. Following table shows different consumer behavior in high-involvement and low-involvement purchase decision (Mullins and Walker, 2010):

Table 2.1. High-involvement and Low-involvement Purchase Decision

High-involvement	Low-involvement
Consumers are information processors	Consumers learn information at random
Consumers are information seekers	Consumers are information gatherers
Consumers represent an active audience for advertising	Consumers represent a passive audience for advertising
Consumers evaluate brands before buying	Consumers buy first, they do evaluate after the purchase
Consumers seek to maximize expected satisfaction	Consumers seek an acceptable level of satisfaction
Personality and lifestyle characteristics are related to consumer behavior.	Personality and lifestyle characteristics are not related to consumer behavior.
Reference groups influence consumer behavior because of the importance of the product to group norms and values	Reference groups exert little influence on consumer behavior because the product is not strongly related to their norms and values.

Source: Solomon, Michael R., "Consumer Behavior", 2009, Prentice Hall.

There are some differences between high-involvement and low-involvement behavior, but we can see that consumer do evaluate in both purchase. In high-involvement purchase, consumers evaluate brands before buying; while in low-involvement purchase, consumers do evaluate after purchase. A consumer's evaluation towards a brand will lead to attitude. An attitude is a positive or negative feeling about an object (say, a brand) that predisposes a person to behave in a particular way toward the object (Mullins and Walker, 2010).

2. 4. Attitude.

An attitude is a predisposition to evaluate an object or product positively or negatively (Solomon, 2009). Attitudes toward a product will determine whether consumer will purchase a product or not. People can be conflicted or ambivalent toward an object, meaning that they simultaneously possess both positive and negative attitudes toward an object.

Three components that make up an attitude are: affect, behavior, and cognition (also called an ABC model of attitudes). First we form beliefs (cognition) about an attitude object, then we evaluate that object (affect), and then we take some action (behavior). Affect is how a consumer feels about an attitude

object. The affective response is an emotional response that expresses an individual's degree of preference for an entity. Behavior refers to consumer's intentions to take action about it. The behavioral intention is a verbal indication or typical behavioral tendency of an individual. Cognition is what consumer believes to be true about the attitude object. The cognitive response is a cognitive evaluation of the entity that constitutes an individual's beliefs about the object.

The ABC model emphasizes the interrelationship among knowing, feeling, and doing. We can't determine consumers' attitudes toward a product simply by identifying their beliefs about it. All three components of an attitude are important, but their relative importance varies depending on a consumer's level of motivation about the attitude object.

2. 5. Multi Attribute Attitude Model.

In earlier times, marketers could understand consumers well through the daily experience of selling to them. But as firms and markets have grown in size, many marketing decision makers have lost information about their customers and now must turn to consumer research. The central question for the marketers is: How do consumers react to various marketing activities that the company might apply? The company that fully understands how consumers will react to different activities has an advantage over its competitors.

Consumers' purchase decision are strongly influenced by cultural, social, personal, and psychological characteristics, however those factors cannot be controlled by marketers as each consumer will have different characteristics.

Through doing and learning, people obtain their beliefs and attitudes. A belief is descriptive thought that a person has about something. Beliefs may be based on real knowledge, opinion, or faith, and sometimes carry an emotional charge. Marketers are interested in the beliefs that people has about specific products and services, because these beliefs make up product and brand images that affect purchase decision.

People have particular attitudes regarding religion, politics, clothes, music, food, and almost everything else. An attitude describes a person's relatively consistent evaluations, feelings, and tendencies toward an object or idea. Attitudes

put people into a frame of mind of liking or disliking things, or moving toward or away from them. Attitudes are difficult to change. A person's attitudes fit into a pattern, and to change one attitude may require difficult adjustments in many others. Thus, a company should usually try to fit its products into existing attitudes rather than try to change people's attitudes.

Because attitudes are so complex, marketers may use multi attribute attitude models to understand consumer's attitudes. The model assumes that a consumer's attitude toward an attitude object depends on the beliefs consumer has about several or many attributes of the object. When we use a multi attribute model, we assume that we can identify these specific beliefs and combine them to derive a measure of the consumer's overall attitude. Basic multi attribute models specify three elements (Solomon, 2009):

- Attributes. Attributes are characteristics of the attitudes.
- Beliefs are cognitions about the specific attributes. A belief measure assesses the extent to which the consumer perceives that a brand possesses a particular attribute.
- Importance weights reflect the relative priority of an attribute to the consumer.

The most influential multi attribute model is The Fishbein model, named after its primary developer. The model measures three components of attitude:

- Salient beliefs people have about an attitude.
- Object-attribute linkages, or the probability that a particular object has an important attribute.
- Evaluation of each of the important attribute.

By combining the three elements, we compute a consumer's overall attitude toward an object. We obtain the overall attitude score by multiplying a consumer's rating of each attribute for all of the brands considered by the importance rating for that attribute.

Consumer researchers have used multi attribute attitude models to predict behavior, however a major problem occurs. Sometimes people do not act correspondingly; people's attitude does not predict the behavior. Many studies reported a very low correlation between a person's reported attitude toward

something and the people's actual behavior toward it. There is indication that consumers tend to rationalize their responses and response what they think are acceptable so rational factors appearing more important while emotional factors appearing less important or no differentiation - everything is important. So it is worthwhile to measure both rational importance and emotive factors.

2. 6. Rational Importance and Stated Importance.

To understand what factors are important for consumers, two association importance was used:

- Rational Importance, or Stated Importance, is the factors that consumers claim to be important when they choose a brand. This is usually the more logical, matter of fact association. This is important to develop the copy, or the tangible aspects, of the brand communication.
- Emotive Importance, or Derived Importance, is the underlying factors that really drive brand choice. This will be achieved through doing statistical computation on the rating given by consumer towards brands. These factors are those that consumers do not say out loud, but emotionally are important for them. These are important to build the tone of voice, or atmosphere, of the brand communication.

While rational importance was calculated by asking consumers directly what factor/ characteristic was important to them, sometimes in many cases what consumers said was important was not reflected in their brand choices. Rational and tangible characteristics tended to be rated high, while intangible, emotional, some would say "irrational" attributes and benefits, tended to be rated low. Yet, practitioners found that there are many product categories where intangible traits are of critical import (e.g., automobiles, beer, clothing, cosmetics, soft drinks), despite the fact that people tend to rate them low, and other product categories where the rational traits are often characteristics that every brand has to have (prices of entry), but don't differentiate between brands, and therefore don't drive brand choice. To help overcome this weakness in the assessment process, during the 1980's and 1990's to date, an indirect measurement approach became a

popular way to assess the influence of factor/ characteristic and benefits on brand choice or customer satisfaction (Clancy, Berger, Krieg, 2007).

This indirect approach to assessing the relative import of different characteristics and benefits are called “derived importance,” the word derived means an indirect approach was taken. Many leading marketing research firm employs the derived importance method using different statistical tools to measure this phenomenon (i.e., the relationship between the degree to which a brand is perceived to have an attribute, and purchase intent for that brand).

As consumers tend to rationalize their responses and response what they think are acceptable, measurement of both rational importance and emotive importance is needed.

2. 7. Jaccard Similarity Coefficient.

While rational importance will be calculated by asking consumers directly what factor/ characteristic is important to them, a different approach is used to measure derived importance. One of the essential tools to measure derived importance is Jaccard similarity coefficient. Jaccard similarity coefficient is a tool to measure how important is different things to different people. This is central to understanding the psychological relationships people have with brands. Jaccard similarity coefficient is more useful because it allow unpacking motivations behind attraction to alternatives.

The Jaccard coefficient is zero if the two sets are disjoint, i.e., they have no common members, and Jaccard coefficient is one if they are identical. Higher numbers indicate better agreement in the sets. Further explanation on Jaccard Similarity Coefficient will be explained in chapter 4.

CHAPTER 3

INDUSTRY PROFILE

For every country in the world, telecommunication industry is very important in boosting economic growth since information and communication played strategic role in facilitating development of other industrial sectors. In Indonesia there was only one company, Telkom (one of the state companies owned by government), used to monopolize telecommunication industry in Indonesia since 1960s until late 1980s. With the needs of fast growing information from all over the world, demand for telecommunication service kept increasing and Telkom alone could not handle all the demands from consumer. Not until 1989 when an updated law on telecommunication industry, No. 3/1989 was made effective, replacing the law No. 5/1964, where private companies were able to operate in telecommunication industry in Indonesia, beside Telkom. The Indonesia government continued to adjust the regulation on telecommunication industry to cope with the fast growing industry.

3. 1. Mobile Phone Industry in Indonesia.

As time goes by, rapid improvements in technology have made it feasible for a wireless telephone to be a substitute product for conventional fixed line telephone. One of the most popular wireless telephone is mobile phone. Mobile phone is much more popular than a fixed line telephone since it has no wires and highly mobile. As a result, fixed line telephone demand is sluggish, if not in declining trend. This is true for all market around the world, including Indonesia.

Indonesia started to liberalize mobile phone industry since 1995. Since that year, private companies were allowed to operate in mobile phone industry openly. While in 1997 mobile phone users were counted only about 1 million, the number grown substantially to 5.7 million in 2001. By the end of 2002, the number grew even higher and reached 11.3 million, exceeding fixed line telephone market which counted at 7.6 million users. By the end of 2009, mobile phone users reached 189 million.

Table 3.1. Number of Mobile Phone Subscribers

Year	Number of subscribers (in million)	Growth
2002	11.3	-
2003	18.5	64%
2004	30.7	66%
2005	49.2	60%
2006	63.9	30%
2007	96.4	51%
2008	160	66%
2009	189	18%

Source: All operators' quarterly report.

Mobile phone industry became more attractive after the introduction of the GSM (global system for mobile communication) technology replacing the earlier system of NMT (Nordic Mobile Telephone) and AMPS (advance mobile phone system). The industry continued to expand rapidly in Indonesia, placing the country as the fourth largest market in Asia after South Korea, China and Japan.

3. 2. Mobile Phone Operations System

In Indonesia, there are two operation systems of mobile phone, which are GSM (Global System for Mobile communication) and CDMA (Code Division Multiple Access).

3. 2. 1. GSM (Global System for Mobile communication)

GSM is a digital communications technology operating at the frequency of 900 MHz. In this frequency, GSM has about 140 slots of carrier frequency canal with uplink frequency bandwidth of 890 MHz - 915 MHz and downlink bandwidth of 935 MHz - 960 MHz. As the numbers of users kept increasing, operators with this frequency use Base Transceiver Station (BTS). With BTS, the device helps the signal to be transmitted to users by using the same frequency.

At the beginning, GSM technology is widely adopted and developed in Europe. GSM has an advantage in terms of international roaming. It does not rely on a supplier in making international roaming that there is no monopoly; the validity of the subscriber is examined before telephone conversation takes place;

with the frequency facility of hopping, no third party could be involved or overhearing the conversation illegally; the voice quality is better and more sensitive; subscribers' capacity is larger and features are more varied.

3. 2. 2. CDMA (Code Division Multiple Access)

CDMA is also a digital technology system, which is widely used in North America. While GSM's strength lies on roaming and width of the application of the technology, the strength of CDMA technology, especially CDMA 20001x, is in voice clearness and speed in data transfer. Unlike GSM, companies who want to produce CDMA handset have to pay royalty to Qualcomm as the license holder. It becomes the main reasons for vendors like Sony Ericsson not to produce a CDMA handset.

3. 2. 3. GSM and CDMA Operator Brands in Indonesia

Currently there are 15 SIM card brands operating in Indonesia; 9 brands are operating in GSM and 6 brands in CDMA system. Following is the complete list:

Table 3.2. List of SIM card brands in Indonesia

System	Company Name	Brand
GSM	Telkomsel	Kartu Halo
		Simpati
		Kartu As
	Indosat	IM3
		Matrix
		Mentari
	Excelcomindo	XL
Natrindo Telepon Selular	Axis	
Hutchison CP Telecommunication	Tri (3)	
CDMA	Telkom	Flexi
	Indosat	Star One
	Bakrie Telecom	Esia
	Mobile 8	Fren
		Hepi
Smart Telecom	Smart	

Source: Processed by the Researcher

In Indonesia, GSM operators are much more popular than CDMA operators. The two main reasons are:

- GSM operators came in to Indonesian market earlier than CDMA operators.
- CDMA mobile phone can only be used in local area. If CDMA mobile phone is to be used in other city (outside home base area), users have to do some kind of activation to their operator beforehand.

Nonetheless, CDMA operators' growth was higher than GSM operators, especially due to the fact that mobile phone users from lower social class users kept increasing. CDMA is associated with low tariff while GSM is strongly associated with good network coverage. Even some consumers use both GSM and CDMA mobile phone to fully utilize benefit from each of those operators. The market share of SIM card brand in Indonesia as per December 2009 was as follows:

Table 3.3. Market Share of SIM Card Brands in Indonesia.

Operator	Market share
Telkomsel (Kartu Halo, Simpati, Kartu As)	42.7%
Indosat (IM3, Matrix, Mentari, Star One)	17.2%
XL	16.2%
Flexi	8.2%
Esia	5.7%
Tri (3)	4.4%
Axis	2.6%
Smart	1.6%
Fren	1.3%

Source: All operators' quarterly report as per December 2009

From the market share data, we can conclude that GSM operators still dominate the market with three major operators had about 75% of the total category share. The three major operators were Telkomsel, Indosat, and XL.

3. 3. Players in the Industry

Telkomsel and Indosat were the first operators started to operate in Indonesia. At the beginning, mobile phone users were only limited to rich people with high income. At that time, mobile phone was still deemed as a luxurious product. Following rapid improvements in technology, the handset price became

more affordable, and the introduction of pre paid system triggered more and more people using mobile phone. After that, more operators came in to the industry, transformed the industry becoming more competitive.

With its high customer base, Indonesia market is really appealing, also the fact that penetration of mobile phone still counted about 65% of total population. Compared to other countries, that numbers were still low, for example mobile phone penetration in Singapore and Malaysia was above 80%. Many foreign investors were aware of the potential and entered Indonesian mobile phone market. Operators from other Asian countries such as Singapore Telecommunication Ltd (SingTel), Singapore Technology Telemedia (STT) from Singapore and Telekom Malaysia and Maxis Communication Bhd from Malaysia established their position in the country by acquired local operators.

3. 3. 1. Telkomsel

Telkomsel officially began operations as a company on 26 May 1995. At that time, the company served as a pilot project for mobile telecommunications project using the GSM digital technology initiated by PT. Telkom and PT. Indosat. The entry of foreign shareholder on 2001-2002 caused a change in the composition of its shareholders. At the moment, Telkom is holding 65% share and Singapore Telecom Mobile (SingTel) is holding the remaining 35%.

There is mutually exclusive agreement between Telkom and Telkomsel. Around 50% of Telkom's BTS are also used by Telkomsel. On the other hand, Telkom uses 8% of BTS units owned by Telkomsel for its Telkom Flexi service.

Currently Telkomsel have 3 different brands, which are Kartu Halo, Simpati, and Kartu As. While Kartu Halo is a post paid payment system, Simpati and Kartu As are a pre paid payment system. As the oldest operators in the market, Telkomsel had first mover advantages and they are the market leader with market share of more than 40%. The strength of Telkomsel relies on the good network coverage, with almost 100% of Indonesian population is covered. It also related to the fact that Telkomsel has about 27,000 BTS transceivers in 2009. As mentioned earlier, Telkomsel is also well-utilized Telkom's distribution channel

that stretched in almost all areas. Under existing dynamic market situation that marked by tariff war, Telkomsel face strong challenge from its competitors.

3. 3. 2. Indosat

The first operator using GSM technology was PT. Satelit Indonesia (Satelindo), formerly owned jointly by the Bimantara Group, Telkom and Indosat. Later on, Indosat and Telkom exchanged shares they had in Satelindo and Telkomsel to prevent joint ownerships and domination by the two largest telecommunications and state companies. In 2003, PT. Satelindo and PT. Indosat Multimedia Mobile (operator of IM3), a subsidiary of Indosat, were merged into Indosat. Indosat maintains cellular phone products of Matrix and Mentari of Satelindo and IM3 of Indosat Multimedia Mobile. In addition to GSM cellular service, Indosat has CDMA fixed wireless service namely StarOne and international and long distance telephone call services. At the moment, Indosat ownership is owned by Indonesian government (15%), STT (41%), and Indonesia Communication Ltd. Public (44%).

At the moment, Indosat has 4 different brands, where three of them operate in GSM system: Matrix (post paid payment system), Mentari and IM3 (pre paid payment system). The other one is StarOne that operates in CDMA operation system. Similar like Telkomsel, Indosat is one of the oldest operators in Indonesia and has reasonably high customer base. In the past three years, Indosat brands are one of the operators that are hit by tariff war competition as their market share decline.

3. 3. 3. XL

PT. Excelcomindo Pratama (XL) was established in 1989 and became a public company by launching initial public offering (IPO) selling 20% of its shares to the public in September 2005. At the moment, Indocel Holding Sdn Bhd own 84% XL ownership and the remaining 16% owned by Etisalat International Indonesia Ltd.

XL has done rebranding strategy several times. From proXL in 1998, they rebranded it to Jempol, Bebas, and Xplor. Later on, they rebranded again to XL

prepaid and XL postpaid in 2007. In line with the brand name transformation, they also shifted their brand proposition from premium high class brand to a value for money brand. With the tariff war that happened recently, XL shows strong performance in acquiring customers, and now closely compete with Indosat to be the second largest operator after Telkomsel. Their value for money brand proposition is also supported by huge spending in advertising campaign on television as well as on print advertising.

3. 4. Tariff War

After experiencing booming period in 2002-2008 periods, the growth of mobile phone users slowed down in 2009. It was related to the fact that already 65% Indonesians own a mobile phone. So the competition now is allied in acquiring remaining population that still do not use a mobile phone, and at the same time grabbing competitors' share. In order to do so, operators must improve their competitiveness relative to the competitors. Nearly all operators translate competitiveness into low price. Often we see that operators seek to undercut each other in tariff to grab higher market share, sometimes by insulted other competitors' advertising campaign. The continuous activities lead to tariff war that already happened since year 2007. However, the association of cellular telephone companies (ATSI) refused to call the competition as a tariff war. The operators only wanted to provide more attractive and cheaper tariffs, it said.

Considering the tight competition, every operator was trying their best to attract consumers' interest and to persuade them purchasing their brand. Those activities led to tariff war. Sometimes, some operators offended other competitors in their promotional campaign. Nevertheless, it is still debatable whether it is beneficial for consumers or not but the fact is telecommunication tariff in Indonesia is lower now. Five years ago, telecommunication tariff in Indonesia was amongst the highest in the world, but now is considered as the lowest in the world.

CHAPTER 4

RESEARCH METHOD

4. 1. Research Design

The type of data used in the research was primary data, collected using descriptive research through meticulous survey technique. A structured questionnaire was used, administered face to face by well trained interviewers. There are some advantages and disadvantages of using the face to face method. Some of the advantages are physical prompts can be used (such as showcard) and body language of interviewers can emphasize questions asked; while the disadvantages are the interviews are costly, timely, and biased can happen when interviewers asking question. Nonetheless, those disadvantages can be minimized by administering a user friendly questionnaire and conducting proper briefing session to the interviewers.

4. 2. Population and Sampling Plan

Population of interest in the research was mobile phone users in Indonesia. Sample of interest in the research was limited to mobile phone users aged 12-50 years old. The sampling area is Jakarta province, the selection was related to cost and time optimization.

4. 3. Sample Size

Total respondent is 480 people, spread all over Jakarta area (North Jakarta, South Jakarta, East Jakarta, West Jakarta, and Central Jakarta). The survey was conducted for period of 3 months between October 2009 and December 2009.

4. 4. Sampling Method

Every respondent was chosen using stratified random sampling. In Jakarta area, there are about 30,000 RTs. Those entire RT list was sorted in ascending order and picked using pre specified interval and random start number. To reduce area bias, only 4 interviews were done in each RT. As the total number of respondent was 480 people, hence 120 RTs were selected as the sampling frame.

Once the RT was selected, then interviewer visited head of the RT to ask for permission. Once granted, interviewer selected random start house, and did a pre specified interval after every successful interview. In each house, only one respondent was allowed to be interviewed. To ensure every person had the same opportunity to be interviewed, kisch grid method amongst household member aged 12-50 was used.

4. 5. Questionnaire Design

The questionnaire consisted of 2 parts, screening section and main questionnaire section. Screening questions were applied to select appropriate respondent for the survey, and each qualified respondent would be asked the main questionnaire section.

In the screening questions, some demographic questions were also asked to maintain good flow of the questionnaire.

- Monthly household expenditure (question S1). This question was asked to decide respondents' social class. The ranges used were based on Nielsen People Meter Index, which is widely used in marketing research purpose.
- Age (question S2). The survey criteria were people aged 12 – 50. Other than those age range, interview would be terminated.
- Mobile phone usership (question S3). In the research, I only interested to mobile phone user, hence non mobile phone users would be terminated.
- Decision maker of SIM card brand used (question S4). The question was asked to ensure that respondent had an influence of the SIM card brand they used.
- Last educational level attained (question S5). This was as an additional demographic question.
- Gender (question S6).

In the main questionnaire, each respondent would be asked several questions to achieve objectives set earlier.

- Brands Recognition (question Q1). As there are quite many brands available in the market, this question was asked to ensure that respondent aware of brands that would be asked in the next question.
- Brands Usage (question Q2). This question was asked to capture what SIM card brand was used by respondent.
- Importance level of each factor/ characteristic (question Q3). The question was asked to capture stated importance or rational importance claimed by respondent. There were 32 characteristics asked in the questionnaire. In the question, interval scale was used to measure different importance level.
- Association of each characteristic with all brands aware of (question Q4). Respondent was asked to associate each characteristic with all brands they aware of. Respondent could select as many brands as they like or none at all.

In question S3 and S4, there were 32 characteristics asked to respondent. Those characteristics were developed based on discussion with three experts in the industry. They believed that those characteristics were sufficient to capture different consumer perception towards SIM card brand.

4. 6. Analysis Method

Data from the survey was generated using Microsoft Excel software. On question Q3 about importance level, mean score (average) of each characteristic was calculated to come up with single number and smoother the data analysis. The question was the source of rational or stated importance score. The weight for each scale as follows:

1. Not important at all (*Sama sekali tidak penting*): Receive weight score of 1
2. Somewhat important (*Sedikit penting*): Receive weight score of 2
3. Important (*Penting*): Receive weight score of 3
4. Very important (*Sangat penting*): Receive weight score of 4
5. Extremely important (*Sangat penting sekali*): Receive weight score of 5

Question Q4 about brand association was the source of brand imagery data and Jaccard Similarity Coefficient.

4. 7. Brand Imagery and Relative Brand Imagery

Brand imagery shows an absolute rating for a brand. For example if the percentage for “cheaper SMS charges” for brand A is 39%, then it means 39% of respondents perceive that brand A as having “cheaper SMS charges”. This measurement is critical to check how many consumers have associated certain brands with certain imageries, how strong have certain imageries built to the brand. But absolute ratings are usually a function of brand saliency or familiarity. That’s why usually market leaders had the highest rating on almost all imageries and small brands got the lower rating on almost all imageries.

But, even though certain brand may have more endorsements on a characteristic but relatively it might be associated weaker to that characteristic compared to other brand for two main reasons:

- That brand has built on other characteristics a lot stronger compared to a characteristic in its imagery set.
- The other brand has built on a characteristic a lot stronger compared to other characteristics in its imagery set.

Example: brand A associated with “cheaper SMS charges” 55% and “strong & clear signal indoor” 75%, while brand B associated with “cheaper SMS charges” 50% and “strong & clear signal indoor” 25%.

Table 4.1. Example of Brand Imagery Data

Brand Imagery	Brand A	Brand B
Cheaper SMS charges	55	50
Strong and clear signal indoor	75	25

Source: An example, processed by the researcher

While brand A is associated more with “cheaper SMS charges” than brand B, but brand A is associated weaker relatively with “cheaper SMS charges” because it is associated a lot stronger with “strong & clear signal indoor”. Brand A differentiated itself with strong & clear signal indoor, brand B with cheaper SMS charges. The differentiation can be seen clearly if we use relative brand imagery.

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Table 4.2. Example of Relative Brand Imagery Data

Relative Brand Imagery	Brand A	Brand B
Cheaper SMS charges	-11	11
Strong and clear signal indoor	11	-11

Source: An example, processed by the researcher

In a complex market with many brands and characteristics, relative brand imagery enables us to see prominent features of a brand's profile, the stronger characteristics that differentiate a brand from another.

4. 8. Jaccard Similarity Coefficient.

While rational importance was calculated by asking consumers directly what factor/ characteristic was important to them, a different approach was used to measure derived importance. One of the essential tools to measure derived importance is Jaccard similarity coefficient. Jaccard similarity coefficient is a tool to measure how important is different things to different people. This is central to understanding the psychological relationships people have with brands. Jaccard similarity coefficient is more useful because it allow unpacking motivations behind attraction to alternatives. The general rule is the higher the Jaccard coefficient, the more important the factor/ characteristic is.

Some rules in measuring Jaccard similarity coefficient:

- Respondents must associate brands with characteristics, and not the other way around.
- Respondents must be allowed to associate all brands they are aware of with a characteristic - not only the ones they use. It is important to measure competitor ratings, and allow us to unpack motivations behind attraction to alternatives.
- There should be a minimum of 4 brands and 4 characteristics in the matrix for the Jaccard score calculations.
- Only positive statements / characteristics should be used.

Given two objects, A and B, each with n binary attributes, the Jaccard similarity coefficient is a useful measure of the overlap that A and B share with

their characteristics. It is defined as the size of the intersection of the sets divided by the size of their union. In other words,

$$J(A, B) = \frac{|A \cap B|}{|A \cup B|} \dots\dots\dots(4.1)$$

where $J(A, B)$ represent the Jaccard coefficient, A and B are the two sets. This can also be expressed in terms of the true positive (TP), false positive (FP), and false negative (FN) sets as $TP / (FP+TP+FN)$.

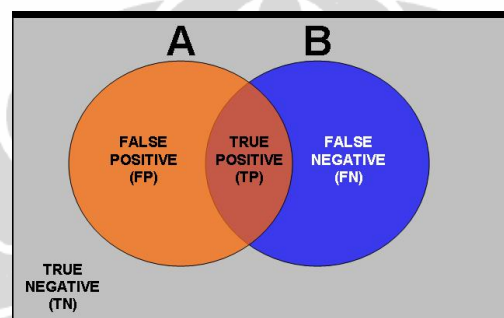


Figure 4.1. Jaccard Similarity Coefficient Explanation

Source: Processed by the Researcher

The value of A and B can either be 0 or 1. The total number of each value for both A and B are specified as follows:

P = number of variables that positive for both objects (both have a value of 1)

Q = number of variables that positive for the 1st object and negative for the 2nd object (Object A has a value of 1, and object B has a value of 0)

R = number of variables that negative for the 1st object and positive for the 2nd object (Object B has a value of 1, and object A has a value of 0)

S = number of variables that negative for both objects (both have a value of 0)

Mathematically, The Jaccard coefficient formula is:

$$J = \frac{P}{(P+Q+R)} \times 100 \dots\dots\dots(4.2)$$

For some applications, the existence of true negative (both have a value of 0) makes it redundant to be measured because it has no meaningful contribution to the similarity measurement. That's why Jaccard coefficient removes the true negative from the measurement, in this case remove number of variables that negative for both objects (both have a value of 0).

The Jaccard coefficient is zero if the two sets are disjoint, i.e., they have no common members, and Jaccard coefficient is one if they are identical. Higher numbers indicate better agreement in the sets.

Applying the Jaccard similarity coefficient to this paper, let's say X is the brand currently used by consumer, and the characteristic being evaluated is cheaper voice call rates.

- If a respondent use brand X and the respondent associate brand X with characteristic cheaper voice call rates, then the value of P is 1.
- If a respondent use brand X and the respondent do not associate brand X with characteristic cheaper voice call rates, then the value of Q is 1.
- If a respondent do not use brand X and the respondent associate brand X with characteristic cheaper voice call rates, then the value of R is 1.
- If a respondent do not use brand X and the respondent do not associate brand X with characteristic cheaper voice call rates, then the value of S is 1.

The similar calculation was done to all brands available in the market and all characteristics asked in the questionnaire.

For example, there are five respondents and three brands (which are X, Y, Z), with usage pattern as follows:

Table 4.3. Example of Brand Currently Used

Respondent	Brand Currently Used
Respondent 1	X
Respondent 2	Y
Respondent 3	Z
Respondent 4	X
Respondent 5	Y

Source: An example, processed by the researcher

Those five respondents are asked to associate brand X, Y, Z about characteristic “cheap voice call rates”. Following table shows the response from each respondent.

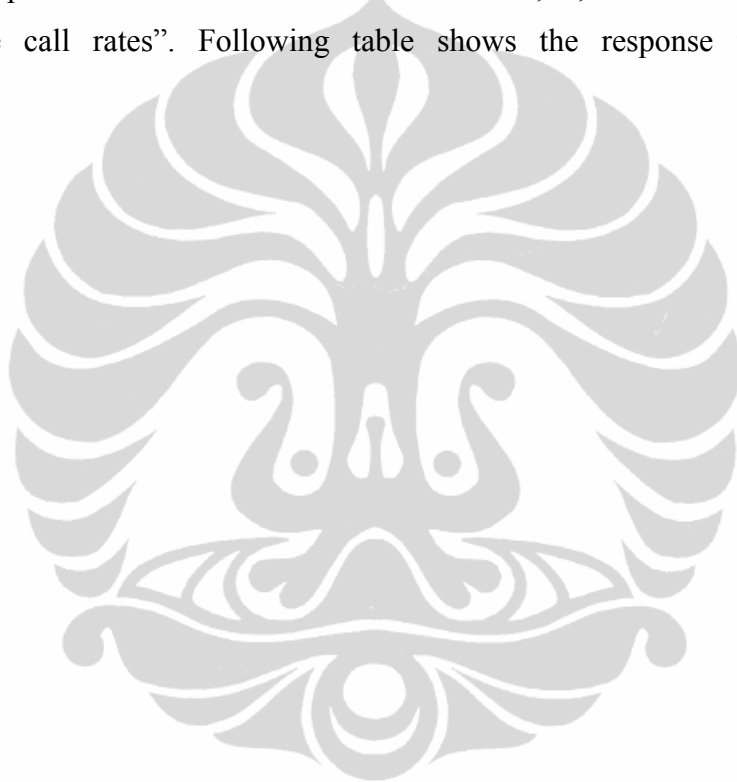


Table 4.4. Example of Jaccard Similarity Coefficient Calculation

	Brand Currently Used	Brands Associated with Cheap voice call rates	Association Score for Brand X				Association Score for Brand Y				Association Score for Brand Z			
			Value of P	Value of Q	Value of R	Value of S	Value of P	Value of Q	Value of R	Value of S	Value of P	Value of Q	Value of R	Value of S
Respondent 1	X	X, Y	1	0	0	0	0	1	0	0	0	0	1	
Respondent 2	Y	Z	0	0	0	1	0	1	0	0	0	1	0	
Respondent 3	Z	X, Y, Z	0	0	1	0	0	1	0	1	0	0	0	
Respondent 4	X	Y, Z	0	1	0	0	0	1	0	0	0	1	0	
Respondent 5	Y	X, Z	0	0	1	0	0	1	0	0	0	1	0	

Source: Processed by the researcher

The Jaccard Similarity Coefficient for characteristic cheap voice call rates is:

Table 4.5. Result of Jaccard Similarity Coefficient Calculation

Total Value of P	2
Total Value of Q	3
Total Value of R	8
Total Value of S	2
Jaccard Score for Cheap voice call rates	$J = (P / (P+Q+R)) \times 100$ $J = (2 / (2+3+8)) \times 100$ $J = 15.4$

Source: Processed by the researcher

CHAPTER 5

ANALYSIS OF FINDINGS

5. 1. Demographic Profile

From total 480 respondents, 269 were male and 211 were female, or 51% male and 49% female.

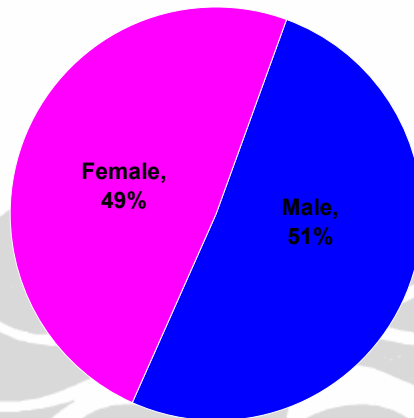


Figure 5.1. Gender Proportion

Source: Processed by the researcher

Respondents were classified into 4 different groups: 12 – 20 years old (student/ younger age group), 21 – 30 years old (early jobbers), 31 – 40 years old (career development stage), and 41 – 50 years old (mature/ older age group) (Rhenald Kasali, 1998). Most of the respondents were in younger age group and early jobbers group, each with 34% proportion.

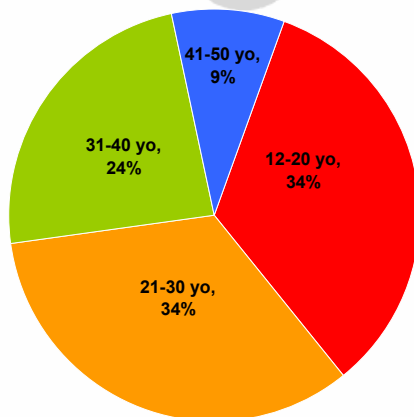


Figure 5.2. Age Group Proportion

Source: Processed by the researcher

Monthly household expenditure question was used to decide respondents' social class (SES). The ranges used are based on Nielsen People Meter Index, which is widely used in marketing research purpose. Following is the classification:

Table 5.1. SES Classification

SES E =	Less than Rp. 600.000
SES D =	Rp. 600.000 – Rp. 900.000
SES C =	Rp. 900.001 – Rp. 1.750.000
SES B =	Rp. 1.750.001 – Rp. 2.500.000
SES A =	More than Rp. 2.500.000

Source: Nielsen People Meter Index

From the total 480 respondents, most of the respondents were classified in SES C group (58%).

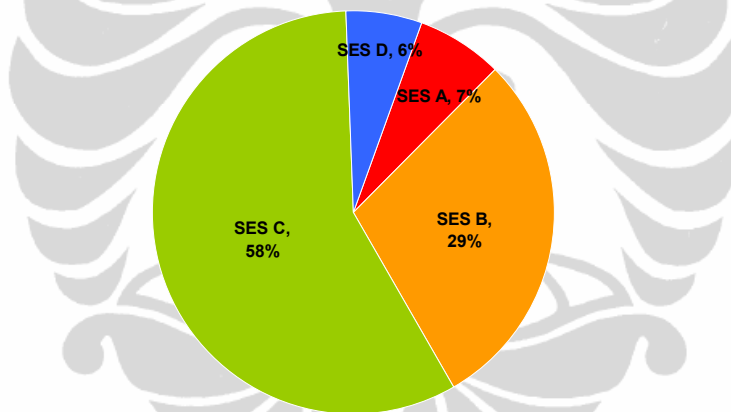


Figure 5.3. SES Proportion

Source: Processed by the researcher

From total 480 respondents, 405 were single user (use only one SIM card brand), and 75 were dual users (use more than one SIM card brand).

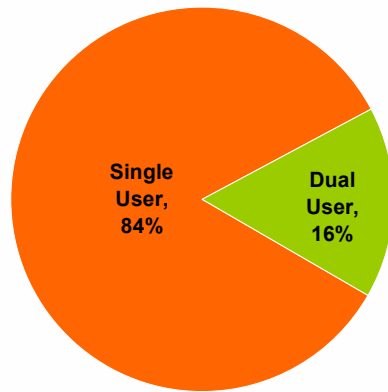


Figure 5.4. Single-Dual Brand Usage

Source: Processed by the researcher

GSM users counted 283 respondents while CDMA users were 250 respondents.

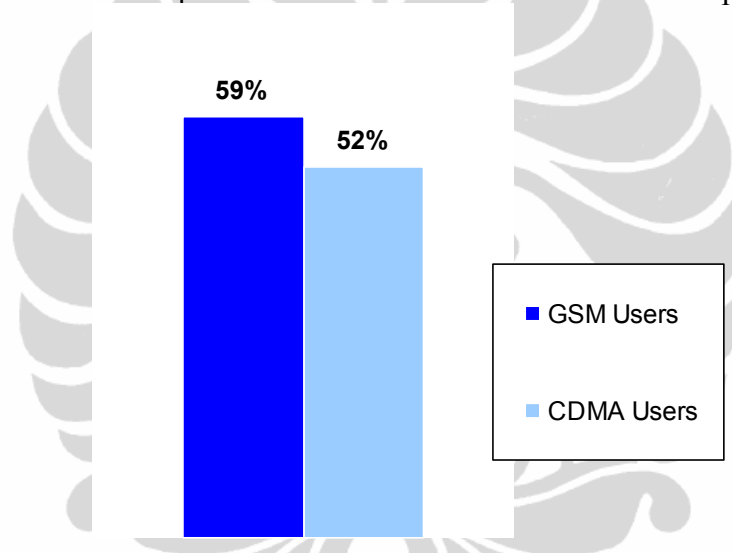


Figure 5.5. GSM-CDMA Users

Source: Processed by the researcher

5. 2. The Most Important Factors in Selecting SIM Card among Total Respondents

To determine which factors were important to consumers, stated importance and derived importance score for each characteristic was compared. Stated importance score was obtained from average score of importance scale (question Q3). The higher the number indicates the characteristic was more important to consumers. Derived importance score was obtained through calculating Jaccard Similarity Coefficient from brand association question

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(question Q4). The higher the Jaccard coefficient, the more important the characteristic was.

The differentiation of the stated importance and derived importance score could be seen clearly if we classified each characteristic into four different quadrants:

1. Quadrant 1 (Core Values/ Motivators) if the characteristics both have stated importance score and derived importance score above average. Characteristics that were included in this quadrant were key factors and have high impact on loyalty. These factors had to be addressed first.
2. Quadrant 2 (Minimum Requirement/ Hygienic) if the characteristics have stated importance score above average but derived importance score below average. These characteristics were important, but they didn't impact brand selection. These were minimum requirements factors, excelling would not gain consumers, but low performance may resulted consumers left them.
3. Quadrant 3 (Value Added/ Hidden Opportunities). If the characteristics have stated importance score below average but derived importance score above average. Respondents said these characteristics were less important, but they impacted brand ratings. These were value added factors, unspoken motivators, hidden opportunities to please consumers.
4. Quadrant 4 (Low/ Not Important). If the characteristics both have stated importance score and derived importance score below average. These characteristics were truly less important than the others.

From all 32 characteristics calculated, mean score was determined as cut off point for both stated importance score and Jaccard coefficient. In the below calculation for mean score of stated importance among total respondents, the mean score was 3.75. Then 3.75 was the cut-off point. Every characteristic that had score above 3.75 were deemed important and characteristics that have score below 3.75 were deemed not important.

Table 5.2. Mean Score of Stated Importance among Total Respondents

Cheaper voice call rates	4.18
Good call quality	4.12
Good national coverage/reach	4.12
Cheaper SMS charges	4.09
Strong and clear signal outdoor	4.08
No call drops	4.06
Cheaper tariff for On-Net Calls	4.04
Strong and clear signal indoor	4.04
Easy network access to make calls	4.01
Good value for money	3.97
No time lag in sending and receiving SMS	3.97
Has long grace period	3.94
Voucher is easily available	3.94
Has long active period	3.92
No time lag in reloading	3.90
Cheaper tariff for On-Net SMS	3.88
Offers various interesting promotions/bonus	3.78
Cheaper voucher price denomination	3.73
Variety of reload voucher values	3.69
Ease of contacting customer service	3.61
Friendly customer service	3.60
Is quick to resolve problems and complaints	3.57
Interesting ads	3.57
Recommended by my friends / families	3.56
Has cheap or free rate for national roaming	3.52
Good international call quality	3.46
Always has new interesting features	3.45
Cheaper rates to call overseas	3.42
Has features that are the most advance/latest in technology	3.32
Offers high speed internet/data access	3.21
Cheaper rates for internet access	3.14
Cheaper rates for Value-Added Services	3.11

Source: Processed by the researcher

The same calculation was done for the Jaccard coefficient, and following was the result:

Table 5.3. Jaccard Coefficient of Derived Importance among Total Respondents

Recommended by my friends / families	44.65
No time lag in reloading	38.21
Ease of contacting customer service	37.67
Friendly customer service	36.65
Good call quality	36.52
Good value for money	36.37
Cheaper voucher price denomination	36.30
Is quick to resolve problems and complaints	35.00
Offers various interesting promotions/bonus	34.73
Cheaper voice call rates	34.52
No time lag in sending and receiving SMS	34.45
No call drops	33.57
Strong and clear signal outdoor	32.88
Variety of reload voucher values	32.85
Cheaper tariff for On-Net Calls	32.66
Easy network access to make calls	32.29
Cheaper tariff for On-Net SMS	32.13
Strong and clear signal indoor	31.73
Always has new interesting features	30.21
Cheaper SMS charges	29.56
Has long active period	28.78
Has long grace period	27.85
Interesting ads	27.11
Good national coverage/reach	26.92
Has features that are the most advance/latest in technology	26.60
Offers high speed internet/data access	24.94
Has cheap or free rate for national roaming	23.33
Cheaper rates for internet access	22.98
Cheaper rates for Value-Added Services	21.88
Good international call quality	21.75
Cheaper rates to call overseas	18.32
Voucher is easily available	16.45

Source: Processed by the researcher

The average of Jaccard coefficient for all those 32 characteristics was 30.60. Then 30.60 was the cut-off point. Every characteristic that had score above 30.60 were deemed important and characteristics that had score below 30.60 were deemed not important.

Combining stated importance and derived importance score, following were the result:

Table 5.4. Stated Important and Derived Importance among Total Respondents

No time lag in reloading	3.90	38.21	CORE
Good call quality	4.12	36.52	CORE
Good value for money	3.97	36.37	CORE
Offers various interesting promotions/bonus	3.78	34.73	CORE
Cheaper voice call rates	4.18	34.52	CORE
No time lag in sending and receiving SMS	3.97	34.45	CORE
No call drops	4.06	33.57	CORE
Strong and clear signal outdoor	4.08	32.88	CORE
Cheaper tariff for On-Net Calls	4.04	32.66	CORE
Easy network access to make calls	4.01	32.29	CORE
Cheaper tariff for On-Net SMS	3.88	32.13	CORE
Strong and clear signal indoor	4.04	31.73	CORE
Good national coverage/reach	4.12	26.92	MINIMUM
Cheaper SMS charges	4.09	29.56	MINIMUM
Has long grace period	3.94	27.85	MINIMUM
Voucher is easily available	3.94	16.45	MINIMUM
Has long active period	3.92	28.78	MINIMUM
Recommended by my friends / families	3.56	44.65	VALUE ADD
Ease of contacting customer service	3.61	37.67	VALUE ADD
Friendly customer service	3.60	36.65	VALUE ADD
Cheaper voucher price denomination	3.73	36.30	VALUE ADD
Is quick to resolve problems and complaints	3.57	35.00	VALUE ADD
Variety of reload voucher values	3.69	32.85	VALUE ADD
Always has new interesting features	3.45	30.21	LOW
Interesting ads	3.57	27.11	LOW
Has features that are the most advance/ latest in technology	3.32	26.60	LOW
Offers high speed internet/data access	3.21	24.94	LOW
Has cheap or free rate for national roaming	3.52	23.33	LOW
Cheaper rates for internet access	3.14	22.98	LOW
Cheaper rates for Value-Added Services	3.11	21.88	LOW
Good international call quality	3.46	21.75	LOW
Cheaper rates to call overseas	3.42	18.32	LOW

Source: Processed by the researcher

In summary, following were the result of the stated importance and derived importance calculation.

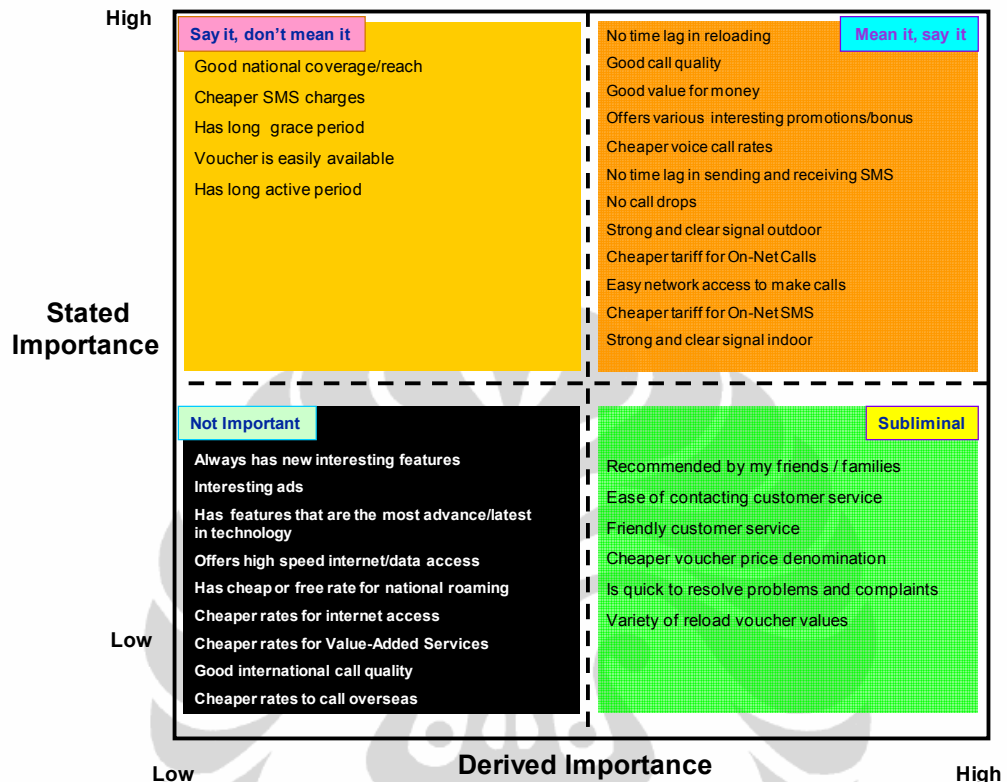


Figure 5.6. Stated Importance VS Derived Importance among Total Respondents

Source: Processed by the researcher

From the above chart we can conclude that following were the most important characteristics that were looked by consumers:

- No time lag in reloading
- Good call quality
- Good value for money
- Offers various interesting promotions/bonus
- Cheaper voice call rates
- No time lag in sending and receiving SMS
- No call drops
- Strong and clear signal outdoor
- Cheaper tariff for On-Net Calls

- Easy network access to make calls
- Cheaper tariff for On-Net SMS
- Strong and clear signal indoor

From all those 12 characteristics, there were three broad categories that were deemed important:

- Good network quality. There were seven key characteristics: no time lag in reloading, good call quality, no time lag in sending and receiving SMS, no call drops, strong and clear signal outdoor, easy network access to make calls, strong and clear signal indoor.
- Cheaper On-Net SMS tariff.
- Cheaper voice call rates, and also cheaper tariff for On-Net Calls.

For an operator to be successful in winning the market, those characteristics must be provided first. If an operator could not provide those characteristics, there would be big possibility that consumers left them. Those characteristics were the key motivators for consumers in choosing SIM card. In addition, offered various interesting promotions/bonus was deemed to be one of key important characteristic as well.

Minimum requirement characteristics were:

- Good national coverage/reach
- Cheaper SMS charges
- Has long grace period
- Voucher is easily available
- Has long active period

From those five characteristics, there were four broad categories that were classified as minimum requirement characteristics:

- Network quality: good national coverage/ reach
- SMS tariff: cheaper SMS charges
- Voucher: has long grace period, and has long active period.
- Distribution: voucher availability.

Those five characteristics were expected to be provided by operators as a minimum standard and consumers claimed that those characteristics must have

been offered by each operator in the market. If an operator could not offer those characteristics, there would be big possibility that consumers left them. Improving those aspects would not gain consumers, but low performance may result consumers left them.

Value added characteristics were:

- Recommended by my friends / families
- Ease of contacting customer service
- Friendly customer service
- Cheaper voucher price denomination
- Is quick to resolve problems and complaints
- Variety of reload voucher values

From those six characteristics, there were three broad categories that were classified as value added characteristics:

- Recommendation: recommended by my friends / families
- Customer service: ease of contacting customer service, friendly customer service, is quick to resolve problems and complaints
- Voucher: cheaper voucher price denomination, variety of reload voucher values

Those six characteristics were less important, but they impacted brand ratings. They were value added characteristics, unspoken motivators, opportunities to please consumers. For operators, those factors were hidden opportunities to win consumers preference.

Following characteristics were not important:

- Always has new interesting features
- Interesting ads
- Has features that are the most advance/latest in technology
- Offers high speed internet/data access
- Has cheap or free rate for national roaming
- Cheaper rates for internet access
- Cheaper rates for Value-Added Services
- Good international call quality

- Cheaper rates to call overseas

From those nine characteristics, there were five broad categories that were classified as not important:

- Innovation: always has new interesting features, has features that are the most advance/latest in technology
- Interesting ads
- Internet related factors: offers high speed internet/data access, cheaper rates for internet access, cheaper rates for Value-Added Services
- Roaming tariff: has cheap or free rate for national roaming
- International call features: good international call quality, cheaper rates to call overseas

Those characteristics were truly not important, can be omitted at the moment. Nevertheless, all characteristics explained earlier could shift over time so operators must also monitor the trend that happened in the market.

5. 3. The Most Important Factors in Selecting SIM Card among Different Gender (Male and Female)

5. 3. 1. The Most Important Factors in Selecting SIM Card among Male.

Amongst male respondents, cut off point for stated importance score was 3.71 and cut off point for derived importance score was 30.79. Combining stated importance and derived importance score, following were the result:

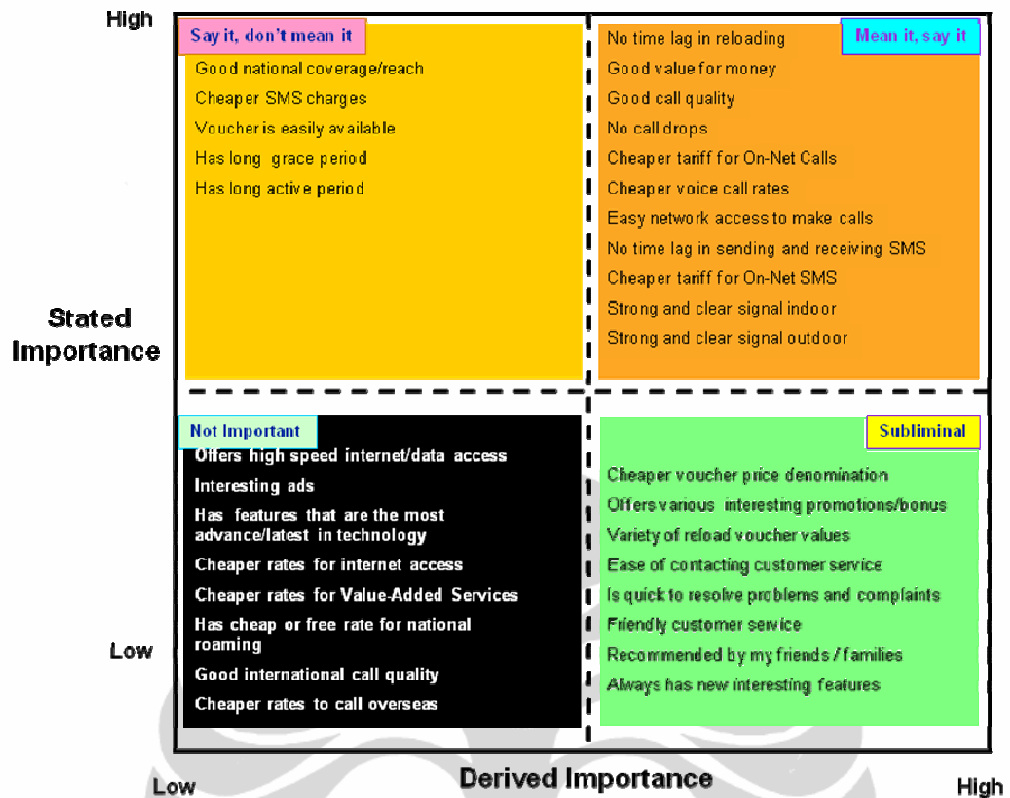


Figure 5.7. Stated Importance VS Derived Importance among Male Respondents

Source: Processed by the researcher

5. 3. 2. The Most Important Factors in Selecting SIM Card among Female.

Amongst female respondents, cut off point for stated importance score was 3.77 and cut off point for derived importance score was 30.41. Combining stated importance and derived importance score, following were the result:

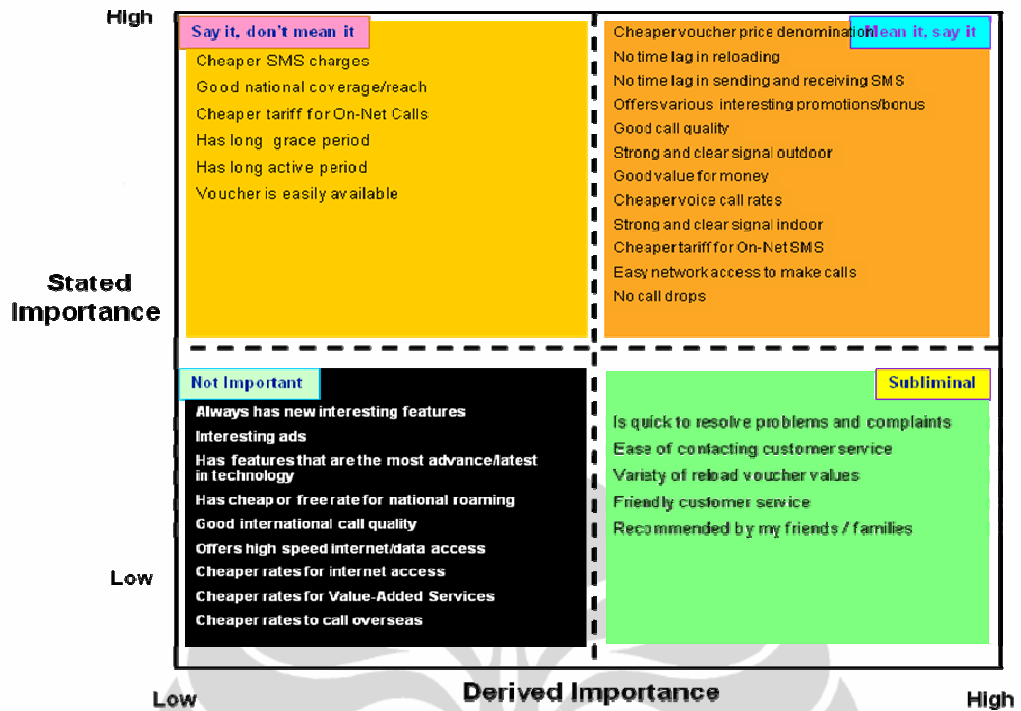


Figure 5.8. Stated Importance VS Derived Importance among Female Respondents

Source: Processed by the researcher

5. 3. 3. Comparing the Most Important Factors in Selecting SIM Card among Male and Female.

Comparing the most important factors among male and female respondents, following were the result:

Table 5.5. The Most Important Factors in Selecting SIM Card among Male and Female

	Male	Female
No time lag in reloading	CORE	CORE
Good value for money	CORE	CORE
Good call quality	CORE	CORE
No call drops	CORE	CORE
Cheaper tariff for On-Net Calls	CORE	MINIMUM
Cheaper voice call rates	CORE	CORE
Easy network access to make calls	CORE	CORE
No time lag in sending and receiving SMS	CORE	CORE
Cheaper tariff for On-Net SMS	CORE	CORE
Strong and clear signal indoor	CORE	CORE
Strong and clear signal outdoor	CORE	CORE
Good national coverage/reach	MINIMUM	MINIMUM
Cheaper SMS charges	MINIMUM	MINIMUM
Voucher is easily available	MINIMUM	MINIMUM
Has long grace period	MINIMUM	MINIMUM
Has long active period	MINIMUM	MINIMUM
Cheaper voucher price denomination	VALUE ADD	CORE
Offers various interesting promotions/bonus	VALUE ADD	CORE
Variety of reload voucher values	VALUE ADD	VALUE ADD
Ease of contacting customer service	VALUE ADD	VALUE ADD
Is quick to resolve problems and complaints	VALUE ADD	VALUE ADD
Friendly customer service	VALUE ADD	VALUE ADD
Recommended by my friends / families	VALUE ADD	VALUE ADD
Always has new interesting features	VALUE ADD	LOW
Offers high speed internet/data access	LOW	LOW
Interesting ads	LOW	LOW
Has features that are the most advance/latest in technology	LOW	LOW
Cheaper rates for internet access	LOW	LOW
Cheaper rates for Value-Added Services	LOW	LOW
Has cheap or free rate for national roaming	LOW	LOW
Good international call quality	LOW	LOW
Cheaper rates to call overseas	LOW	LOW

Source: Processed by the researcher

Comparing the most important factors between male and female, there was very little differentiation. The implication was there was no clear benefit could be offered to attract different gender by operators.

5. 4. The Most Important Factors in Selecting SIM Card among Different Age Group (age 12-20, age 21-30, age 31-40, age 41-50).

5. 4. 1. The Most Important Factors in Selecting SIM Card among 12-20 Years Old Respondents.

Among 12-20 years old respondents, cut off point for stated importance score was 3.82 and cut off point for derived importance score was 28.73. Combining stated importance and derived importance score, following were the result:

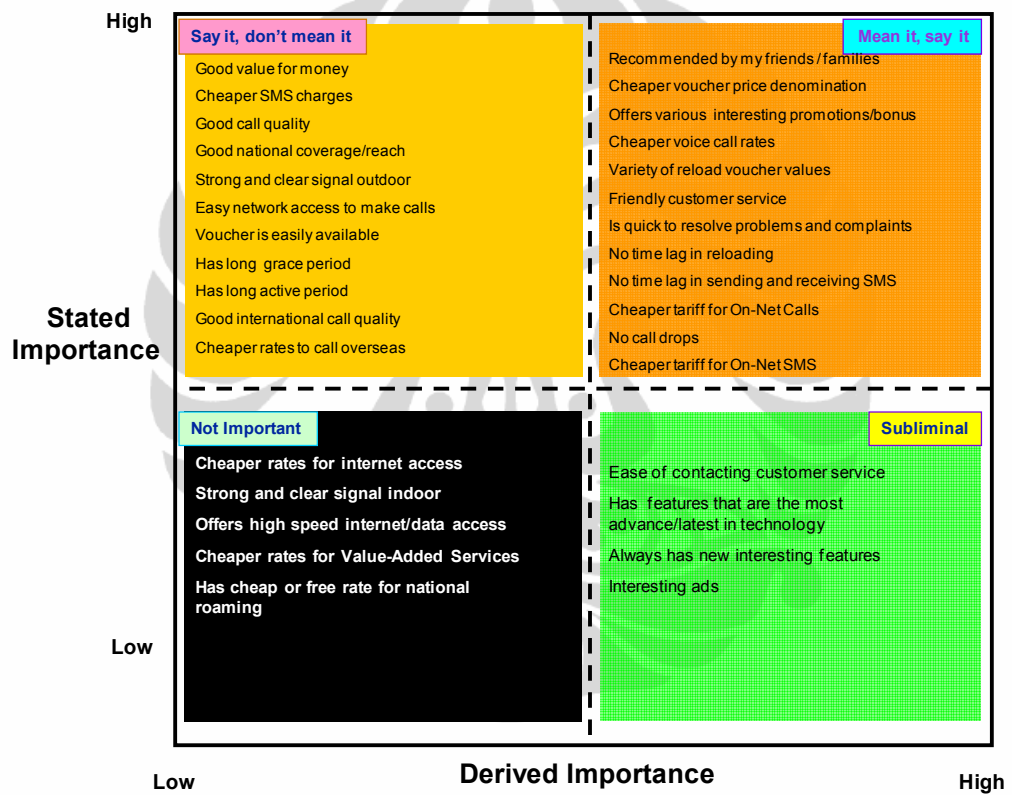


Figure 5.9. Stated Importance VS Derived Importance among 12-20 Years Old Respondents

Source: Processed by the researcher

5. 4. 2. The Most Important Factors in Selecting SIM card among 21-30 Years Old Respondents.

Among 21-30 years old respondents, cut off point for stated importance score was 3.76 and cut off point for derived importance score was 30.94. Combining stated importance and derived importance score, following were the result:

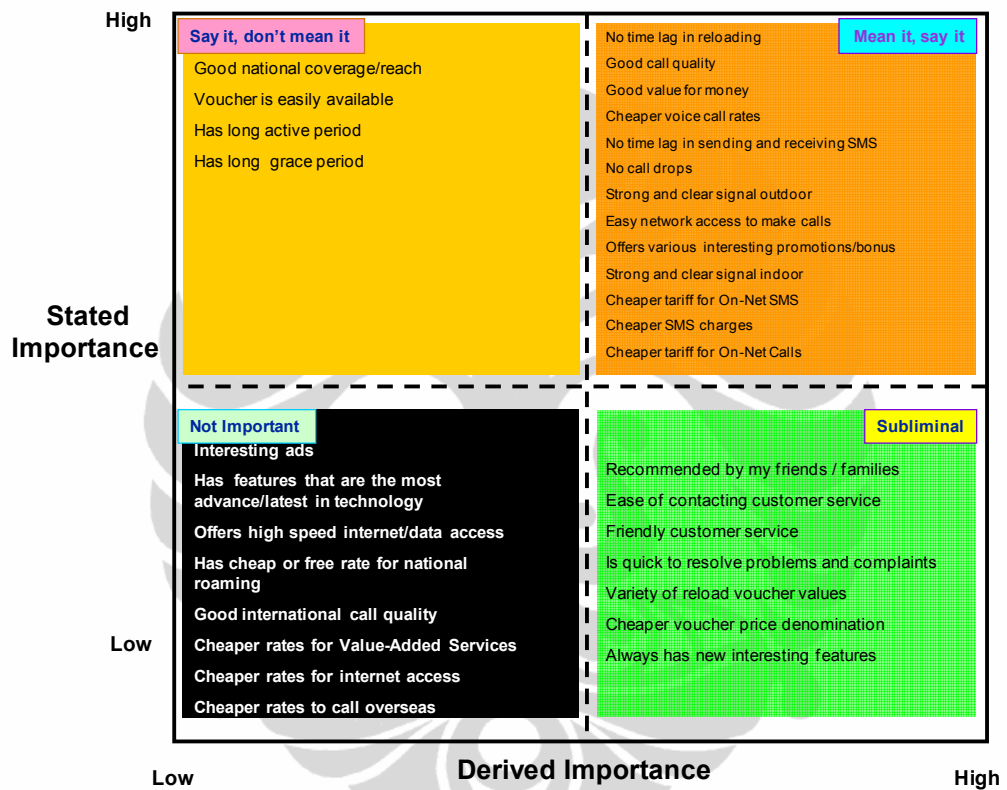


Figure 5.10. Stated Importance VS Derived Importance among 21-30 Years Old Respondents

Source: Processed by the researcher

5. 4. 3. The Most Important Factors in Selecting SIM Card among 31-40 Years Old Respondents.

Among 31-40 years old respondents, cut off point for stated importance score was 3.76 and cut off point for derived importance score was 30.97. Combining stated importance and derived importance score, following were the result:

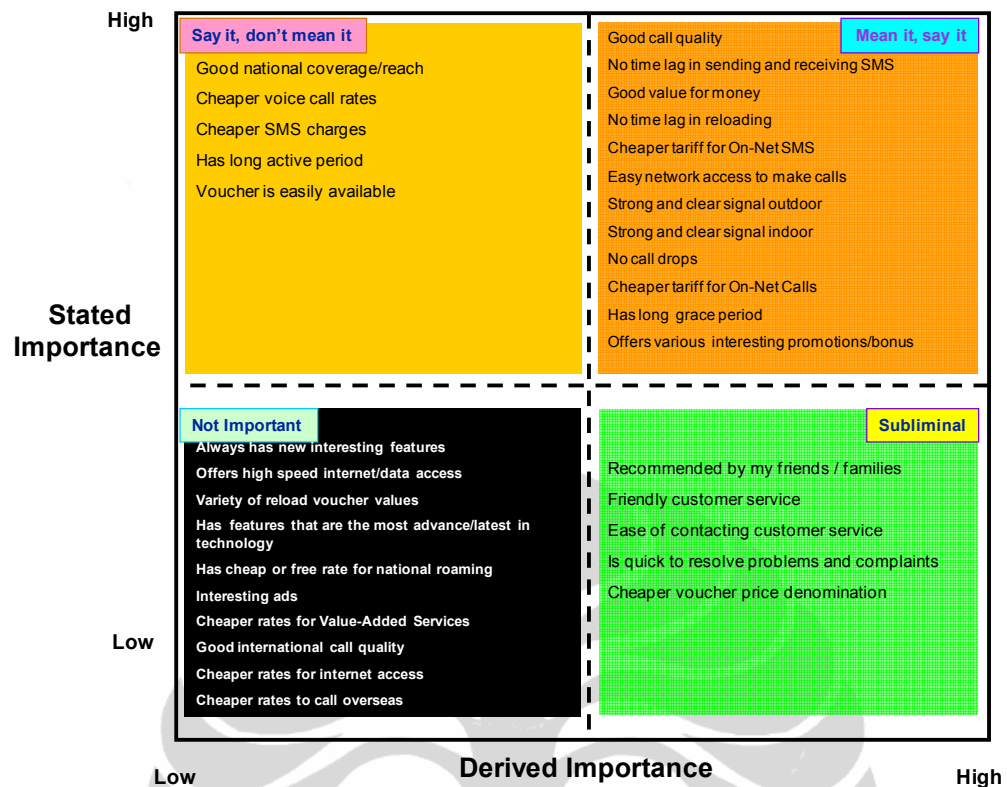


Figure 5.11. Stated Importance VS Derived Importance among 31-40 Years Old Respondents

Source: Processed by the researcher

5. 4. 4. The Most Important Factors in Selecting SIM Card among 41-50 Years Old Respondents.

Amongst 41-50 years old respondents, cut off point for stated importance score was 3.70 and cut off point for derived importance score was 31.43. Combining stated importance and derived importance score, following were the result:

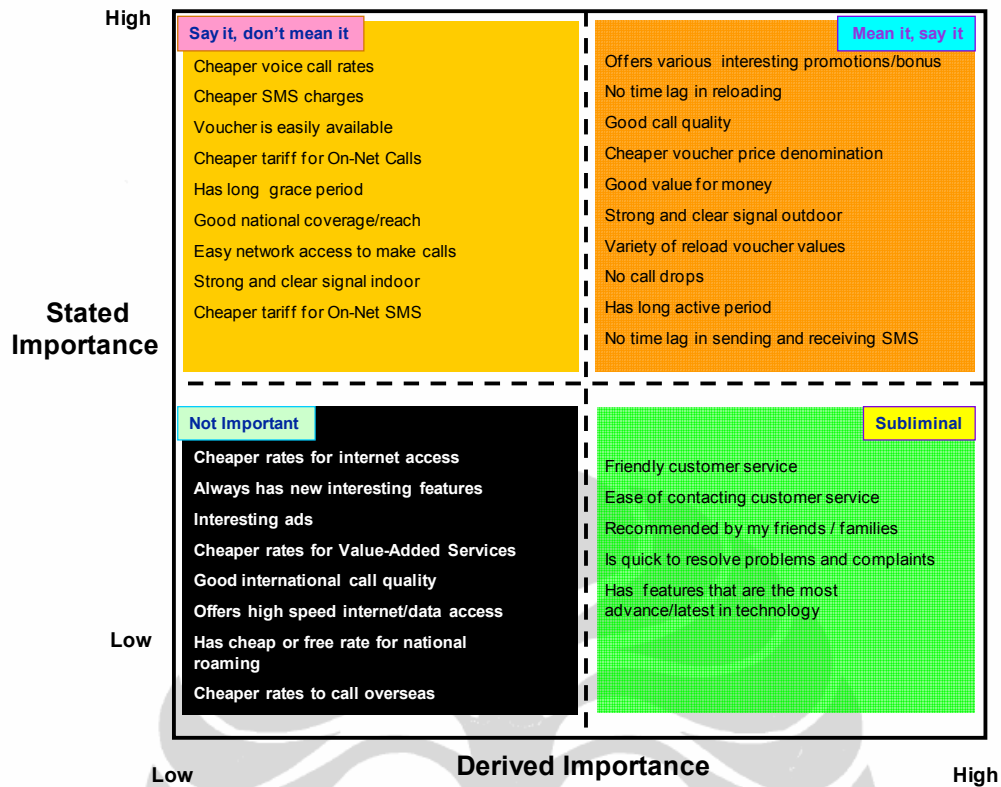


Figure 5.12. Stated Importance VS Derived Importance among 41-50 Years Old Respondents
 Source: Processed by the researcher

5. 4. 5. Comparing the Most Important Factors in Selecting SIM Card among Different Age Group (age 12-20, age 21-30, age 31-40, age 41-50).

Comparing the most important factors among different age group, following were the result:

Table 5.6. The Most Important Factors in Selecting SIM Card among Different Age Group

	12-20 yo	21-30 yo	31-40 yo	41-50 yo
Recommended by my friends / families	CORE	VALUE ADD	VALUE ADD	VALUE ADD
Cheaper voucher price denomination	CORE	VALUE ADD	VALUE ADD	CORE
Offers various interesting promotions/ bonus	CORE	CORE	CORE	CORE
Cheaper voice call rates	CORE	CORE	MINIMUM	MINIMUM
Variety of reload voucher values	CORE	VALUE ADD	LOW	CORE
Friendly customer service	CORE	VALUE ADD	VALUE ADD	VALUE ADD
Is quick to resolve problems and complaints	CORE	VALUE ADD	VALUE ADD	VALUE ADD
No time lag in reloading	CORE	CORE	CORE	LOW
No time lag in sending and receiving SMS	CORE	CORE	CORE	CORE
Cheaper tariff for On-Net Calls	CORE	CORE	CORE	MINIMUM
No call drops	CORE	CORE	CORE	CORE
Cheaper tariff for On-Net SMS	CORE	CORE	CORE	MINIMUM
Good value for money	MINIMUM	CORE	CORE	CORE
Cheaper SMS charges	MINIMUM	CORE	MINIMUM	MINIMUM
Good call quality	MINIMUM	CORE	CORE	CORE
Good national coverage/reach	MINIMUM	MINIMUM	MINIMUM	MINIMUM
Strong and clear signal outdoor	MINIMUM	CORE	CORE	CORE
Easy network access to make calls	MINIMUM	CORE	CORE	MINIMUM
Voucher is easily available	MINIMUM	MINIMUM	MINIMUM	MINIMUM
Has long grace period	MINIMUM	MINIMUM	CORE	MINIMUM
Has long active period	MINIMUM	MINIMUM	MINIMUM	CORE
Good international call quality	MINIMUM	LOW	LOW	LOW
Cheaper rates to call overseas	MINIMUM	LOW	LOW	LOW
Ease of contacting customer service	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Has features that are the most advance/latest in technology	VALUE ADD	LOW	LOW	VALUE ADD
Always has new interesting features	VALUE ADD	VALUE ADD	LOW	LOW
Interesting ads	VALUE ADD	LOW	LOW	LOW
Cheaper rates for internet access	LOW	LOW	LOW	LOW
Strong and clear signal indoor	LOW	CORE	CORE	MINIMUM
Offers high speed internet/data access	LOW	LOW	LOW	LOW
Cheaper rates for Value-Added Services	LOW	LOW	LOW	LOW
Has cheap or free rate for national roaming	LOW	LOW	LOW	LOW

Source: Processed by the researcher

Comparing the most important factors between different age group, there was some differentiation observed:

- Cheaper voice call rates was deemed more important for younger age group (12-20 yo) than older age group (21+ yo). It was related to the fact that 12-20 years old consumers did not have personal income yet so they had to review their spending more carefully and select SIM card brand that offered cheaper tariff.
- Recommendation by friends/ families was the most important factor for 12-20 years old age group. Consumers at the age of 12-20 years old were the first time users, so they were looking for others' recommendation. They tend to use similar SIM card brand with what SIM card brand their community used.
- Network reliability features were perceived more important for older age group (21+ years old) than younger age group (12-20 years old). Most of older age group consumers were working people or housewife. They did not mind to pay higher tariff as long as they could rely on the good network quality of their SIM card brand.
- Cheaper SMS charge was deemed less important for 41-50 years old consumers, indicatively because they utilized less SMS than younger age group did.

5. 5. The Most Important Factors in Selecting SIM Card among Different Social Class/ SES (SES A, SES B, SES C, SES D)

5. 5. 1. The Most Important Factors in Selecting SIM Card among SES A (Monthly Household Expenditure More Than Rp. 2.500.000)

Among SES A respondents, cut off point for stated importance score was 3.87 and cut off point for derived importance score was 31.52. Combining stated importance and derived importance score, following were the result:

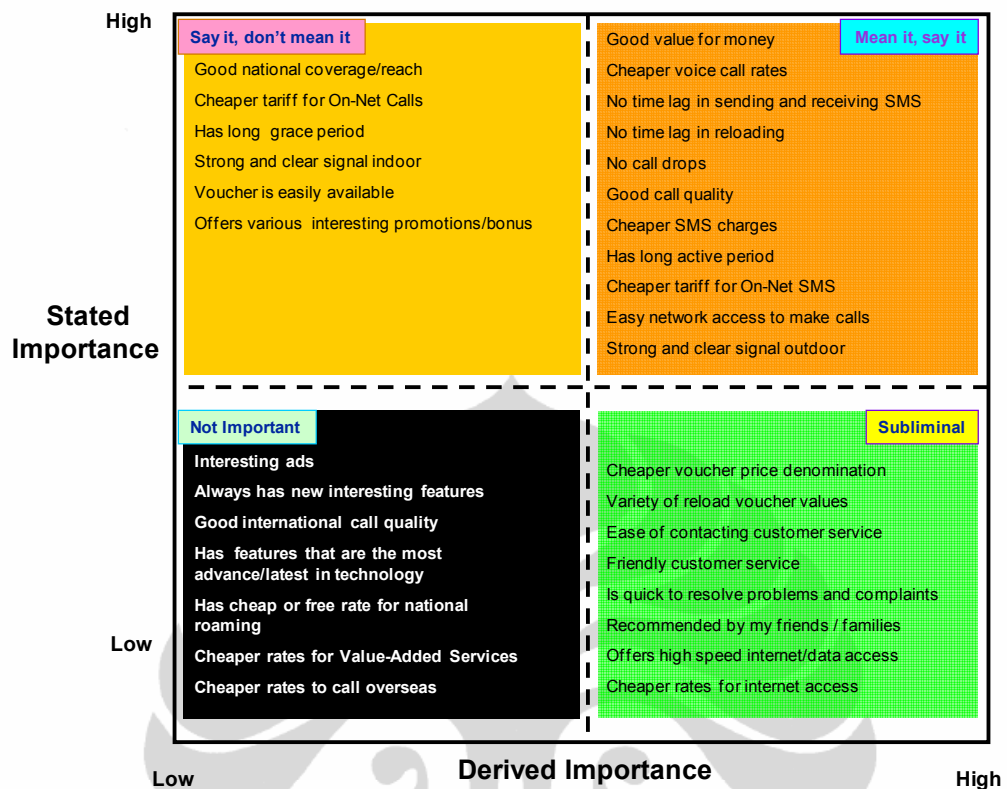


Figure 5.13. Stated Importance VS Derived Importance among SES A Respondents

Source: Processed by the researcher

5. 5. 2. The Most Important Factors in Selecting SIM Card among SES B (Monthly Household Expenditure Rp. 1.750.001 – Rp. 2.500.000)

Among SES B respondents, cut off point for stated importance score was 3.60 and cut off point for derived importance score was 30.76. Combining stated importance and derived importance score, following were the result:

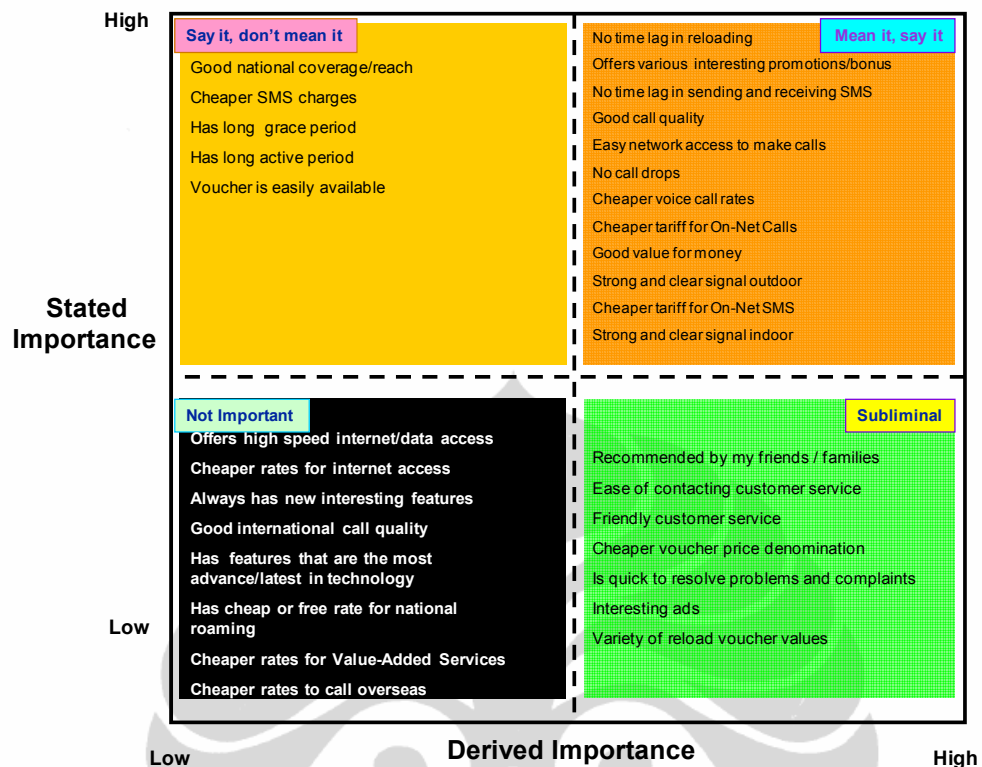


Figure 5.14. Stated Importance VS Derived Importance among SES B Respondents

Source: Processed by the researcher

5. 5. 3. The Most Important Factors in Selecting SIM Card among SES C (Monthly Household Expenditure Rp. 900.001 – Rp. 1.750.000)

Among SES C respondents, cut off point for stated importance score was 3.81 and cut off point for derived importance score was 30.40. Combining stated importance and derived importance score, following were the result:

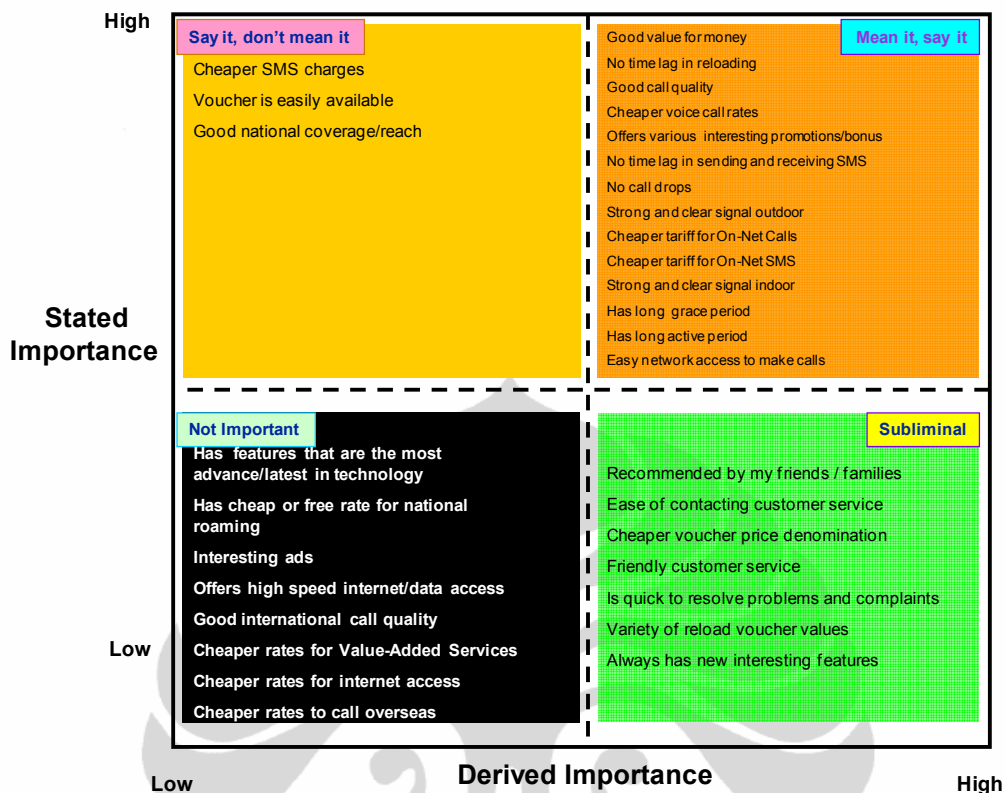


Figure 5.15. Stated Importance VS Derived Importance among SES C Respondents

Source: Processed by the researcher

5. 5. 4. The Most Important Factors in Selecting SIM Card among SES DE (Monthly Household Expenditure Rp. 900.000 or lower)

Among SES DE respondents, cut off point for stated importance score was 3.81 and cut off point for derived importance score was 30.96. Combining stated importance and derived importance score, following were the result:

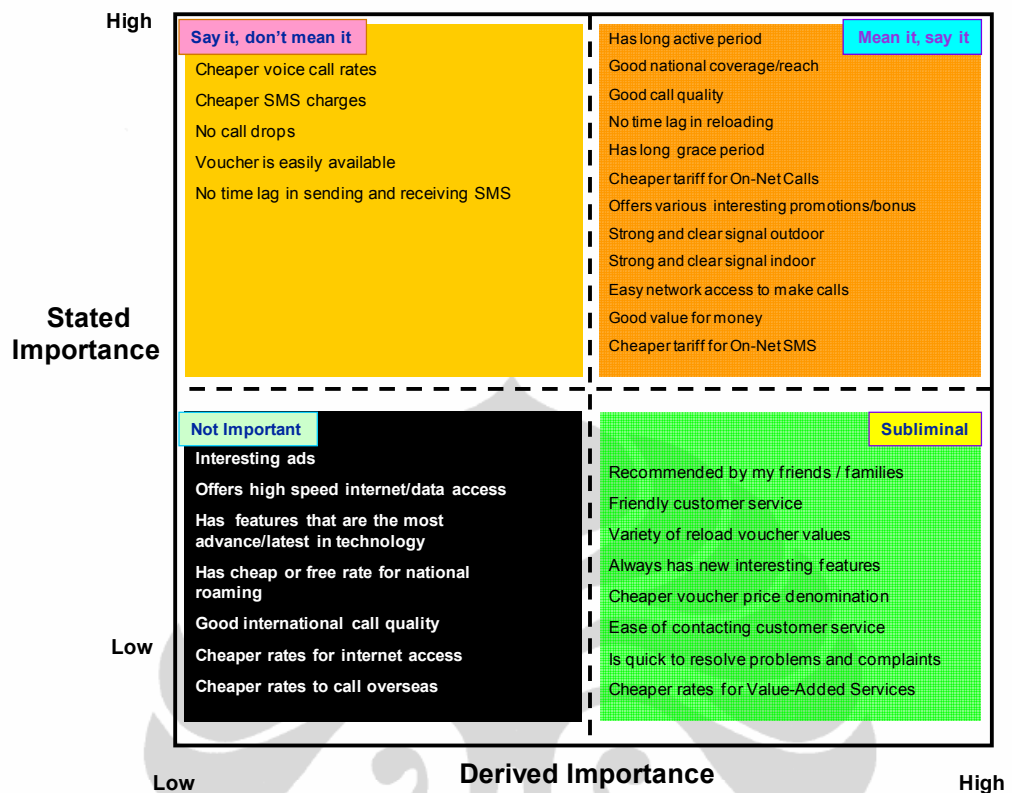


Figure 5.16. Stated Importance VS Derived Importance among SES DE Respondents

Source: Processed by the researcher

5. 5. 5. Comparing the Most Important Factors in Selecting SIM Card among Different SES.

Comparing the result of stated importance score and derived importance score among different SES respondents, following were the result:

Table 5.7. The Most Important Factors in Selecting SIM Card among Different SES

	SES A	SES B	SES C	SES DE
Good value for money	CORE	CORE	CORE	CORE
Cheaper voice call rates	CORE	CORE	CORE	MINIMUM
No time lag in sending and receiving SMS	CORE	CORE	CORE	MINIMUM
No time lag in reloading	CORE	CORE	CORE	CORE
No call drops	CORE	CORE	CORE	MINIMUM
Good call quality	CORE	CORE	CORE	CORE
Cheaper SMS charges	CORE	MINIMUM	MINIMUM	MINIMUM
Has long active period	CORE	CORE	CORE	CORE
Cheaper tariff for On-Net SMS	CORE	CORE	CORE	CORE
Easy network access to make calls	CORE	CORE	CORE	CORE
Strong and clear signal outdoor	CORE	CORE	CORE	CORE
Good national coverage/reach	MINIMUM	MINIMUM	MINIMUM	CORE
Cheaper tariff for On-Net Calls	MINIMUM	CORE	CORE	CORE
Has long grace period	MINIMUM	MINIMUM	CORE	CORE
Strong and clear signal indoor	MINIMUM	CORE	CORE	CORE
Voucher is easily available	MINIMUM	MINIMUM	MINIMUM	MINIMUM
Offers various interesting promotions/bonus	MINIMUM	CORE	CORE	CORE
Cheaper voucher price denomination	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Variety of reload voucher values	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Ease of contacting customer service	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Friendly customer service	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Is quick to resolve problems and complaints	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Recommended by my friends / families	VALUE ADD	VALUE ADD	VALUE ADD	VALUE ADD
Offers high speed internet/data access	VALUE ADD	LOW	LOW	LOW
Cheaper rates for internet access	VALUE ADD	LOW	LOW	LOW
Interesting ads	LOW	VALUE ADD	LOW	LOW
Always has new interesting features	LOW	LOW	LOW	VALUE ADD
Good international call quality	LOW	LOW	LOW	LOW
Has features that are the most advance/latest in technology	LOW	LOW	LOW	LOW
Has cheap or free rate for national roaming	LOW	LOW	LOW	LOW
Cheaper rates for Value-Added Services	LOW	LOW	LOW	LOW
Cheaper rates to call overseas	LOW	LOW	LOW	LOW

Source: Processed by the researcher

Comparing the most important factors between different SES, there was very little differentiation. The implication was there was no clear benefit could be offered to attract consumer in different social class segment. Good network quality, cheaper SMS tariff, and cheaper voice call rates were deemed as the most important factors across all social class.

5. 6. The Most Important Factors in Selecting SIM Card among GSM and CDMA Users.

5. 6. 1. The Most Important Factors in Selecting SIM Card among GSM Users.

Among GSM Users, cut off point for stated importance score was 3.75 and cut off point for derived importance score was 37.40. Combining stated importance and derived importance score, following were the result:

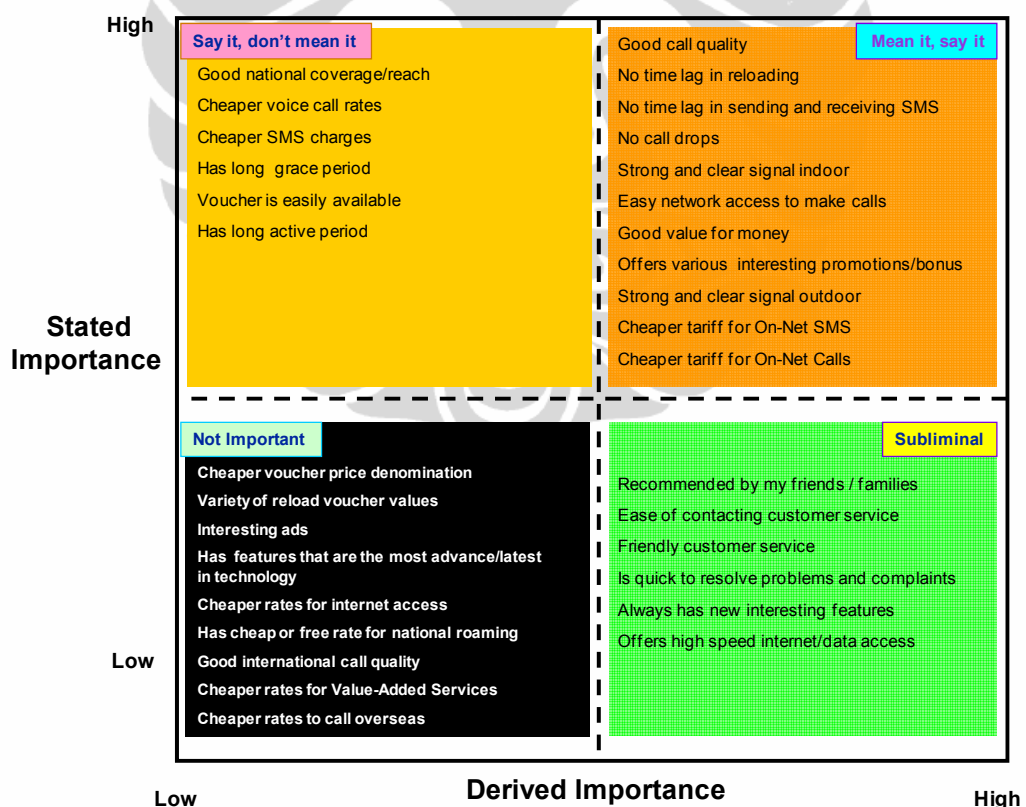


Figure 5.17. Stated Importance VS Derived Importance among GSM Users

Source: Processed by the researcher

5. 6. 2. The Most Important Factors in Selecting SIM Card among CDMA Users.

Among CDMA Users, cut off point for stated importance score was 3.79 and cut off point for derived importance score was 23.70. Combining stated importance and derived importance score, following were the result:

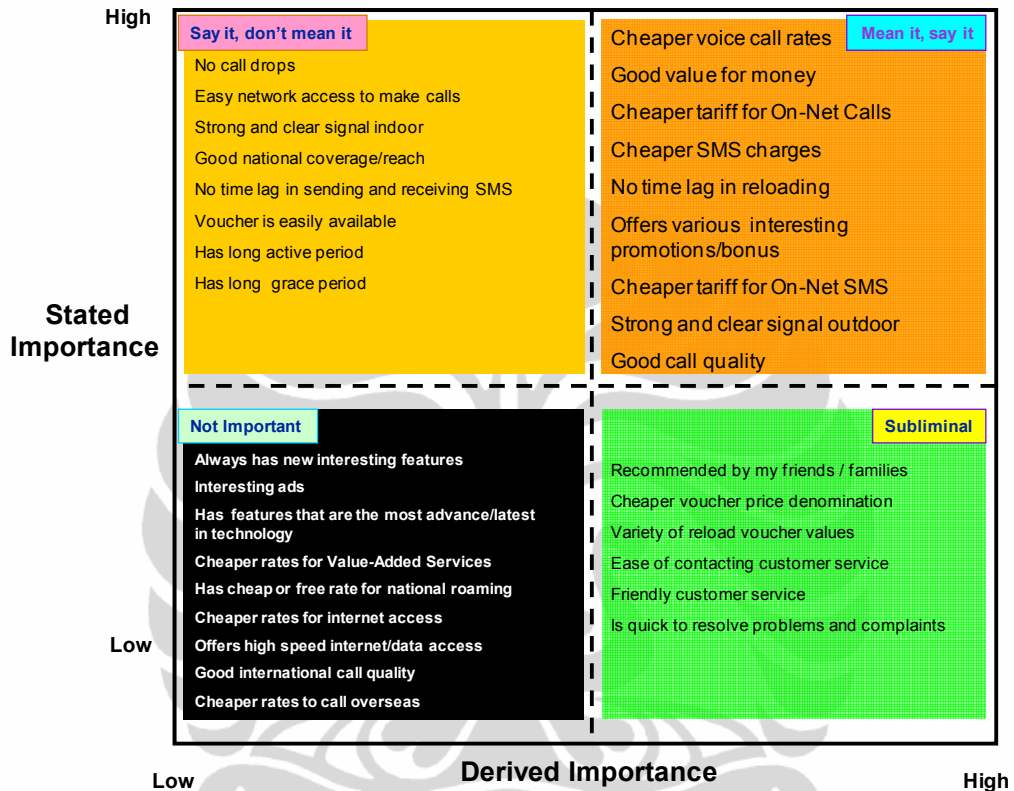


Figure 5.18. Stated Importance VS Derived Importance among CDMA Users

Source: Processed by the researcher

5. 6. 3. Comparing the Most Important Factors in Selecting SIM Card among GSM and CDMA Users.

Comparing the result of stated importance score and derived importance score among GSM and CDMA users, following were the result:

Table 5.8. The Most Important Factors in selecting SIM Card among GSM and CDMA Users

	GSM Users	CDMA Users
Good call quality	CORE	CORE
No time lag in reloading	CORE	CORE
No time lag in sending and receiving SMS	CORE	MINIMUM
No call drops	CORE	CORE
Strong and clear signal indoor	CORE	MINIMUM
Easy network access to make calls	CORE	MINIMUM
Good value for money	CORE	CORE
Offers various interesting promotions/bonus	CORE	CORE
Strong and clear signal outdoor	CORE	CORE
Cheaper tariff for On-Net SMS	CORE	CORE
Cheaper tariff for On-Net Calls	CORE	CORE
Good national coverage/reach	MINIMUM	CORE
Cheaper voice call rates	MINIMUM	CORE
Cheaper SMS charges	MINIMUM	CORE
Has long grace period	MINIMUM	CORE
Voucher is easily available	MINIMUM	CORE
Has long active period	MINIMUM	CORE
Recommended by my friends / families	VALUE ADD	VALUE ADD
Ease of contacting customer service	VALUE ADD	VALUE ADD
Friendly customer service	VALUE ADD	VALUE ADD
Is quick to resolve problems and complaints	VALUE ADD	VALUE ADD
Always has new interesting features	VALUE ADD	LOW
Offers high speed internet/data access	VALUE ADD	LOW
Cheaper voucher price denomination	LOW	LOW
Variety of reload voucher values	LOW	LOW
Interesting ads	LOW	LOW
Has features that are the most advance/latest in technology	LOW	LOW
Cheaper rates for internet access	LOW	LOW
Has cheap or free rate for national roaming	LOW	LOW
Good international call quality	LOW	LOW
Cheaper rates for Value-Added Services	LOW	LOW
Cheaper rates to call overseas	LOW	LOW

Source: Processed by the researcher

Comparing the most important factors between GSM and CDMA users, there was some differentiation observed:

- CDMA users perceived network quality was seen somewhat less important than GSM users.
- Also, CDMA users perceived cheaper voice call rates and cheaper SMS tariff were more important than GSM users.

- Other than that, CDMA users deemed long active period and long grace period were more important than GSM users.

5. 7. The strength and weakness of major operators in mobile phone industry in Indonesia

From the market share data, three major operators (Telkomsel, Indosat, and XL) had about 75% of the total category share. To understand the strength and weakness of those major operators, relative brand imagery of the biggest brand from each operator was analyzed. Simpati brand was used as a proxy for Telkomsel, IM3 brand was used as a proxy for Indosat, and XL.

Brand imageries are usually a function of brand saliency or familiarity and makes market leaders usually had the highest rating on almost all imageries and small brands got the lower rating on almost all imageries. In a complex market with many brands and characteristics, relative brand imagery enables us to see prominent features of a brand's profile, the stronger characteristics that differentiate a brand from another. Using relative brand imagery principle, following were the result of three biggest brands in the mobile phone industry:

Table 5.9. Relative Brand Imagery

	Simpati	IM3	XL
Cheaper voice call rates	-9	4	5
Cheaper SMS charges	-15	13	2
Good call quality	11	-8	-3
No call drops	10	-7	-3
Easy network access to make calls	9	-5	-4
Good value for money	10	-8	-2
No time lag in sending and receiving SMS	5	-4	-1
Has long active period	3	6	-9
Has long grace period	4	-10	6
No time lag in reloading	8	-6	-2
Cheaper tariff for on-net calls	4	-2	-2
Strong and clear signal indoor	15	-11	-4
Cheaper tariff for on-net SMS	-11	9	2
Good national coverage/reach	15	-16	1
Strong and clear signal outdoor	5	-4	-1
Voucher is easily available	-9	9	0
Offers various interesting promotions	-15	4	11
Cheaper voucher price denomination	-14	14	0
Ease of contacting customer service	3	-1	-2
Is quick to resolve problems and complaints	2	-1	-1
Friendly customer service	-1	0	1
Recommended by my friends / families	4	1	-5
Variety of reload voucher values	-11	6	5
Interesting ads	-23	5	18
Always has new interesting features	-2	1	1
Has cheap rate for national roaming	10	-9	-1
Good international call quality	14	-10	-4
Cheaper rates to call overseas	4	-4	0
Has features that are the most advance/latest in technology	4	-3	-3
Offers high speed internet/data access	-4	9	-5
Cheaper rates for Value-Added Services	-10	10	0
Cheaper rates for internet access	-15	15	0

Source: Processed by the researcher

From the relative brand imagery calculation above, we can conclude the strength of those three brands:

- Simpati's strength were on network reliability aspects (including strong and clear signal indoor, good national coverage/reach, good call quality, no call drops, good value for money, easy network access to make calls, no time lag in reloading, no time lag in sending and receiving SMS, strong and clear signal outdoor) and international call features (including good international call quality, has cheap rate for national roaming).

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- IM3's strength were factors related to internet (including cheaper rates for internet access, cheaper rates for Value-Added Services, offers high speed internet/data access), voucher and distribution characteristics (including cheaper voucher price denomination, voucher is easily available, has long active period, variety of reload voucher values), cheaper SMS (including cheaper SMS charges and cheaper tariff for on-net SMS), and interesting ads.
- XL's strength were interesting ads, offers various interesting promotions, has long grace period, variety of reload voucher values.

The weaknesses of those three brands were:

- Simpati's weakness were on interesting ads, innovation (offers various interesting promotions), cheaper tariff (including cheaper SMS charges, cheaper rates for internet access, cheaper tariff for on-net SMS, cheaper rates for Value-Added Services, cheaper voice call rates), voucher characteristics (cheaper voucher price denomination variety of reload voucher values and voucher is easily available).
- IM3's weakness were on network aspects (including good national coverage/reach, strong and clear signal indoor, good call quality, no call drops, no time lag in reloading, easy network access to make calls), has long grace period, international call features (including good international call quality, has cheap rate for international roaming), and also good value for money.
- XL's weakness were has long active period and offers high speed internet/data access.

5. 8. Managerial Implication

There were different task that need to be improved by each different operator. Following were the tasks that need to be addressed by each different operator.

5. 8. 1. Simpati (Telkomsel)

As network is the core factor that was looked by consumer in selecting SIM card brand, Simpati should maintain their position as operator with the best

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network quality to strengthen their position as the market leader. The number of BTS (Base Transceiver Station) population can be used to measure how reliable network of operators are. All operators keep trying to increase their BTS number to meet increasing capacity demands. In 2009, the number of Telkomsel's BTS reached about 27000, Indosat was 14162, and XL was 18128. Simpati, in this case is Telkomsel, should be aware of competitors actions (especially Indosat and XL) as they spent huge investment in BTS deployment. To tackle competitors actions related to BTS deployment, Telkomsel should put investment in building more BTS. Considering that mobile phone is used by everybody from all social class, Telkomsel should also build BTS in small cities as well to attract consumers nearby that area. By putting more investment in BTS deployment, Telkomsel could maintain their position as operators with the best network quality.

5. 8. 2. IM3 (Indosat)

IM3 was the second largest operator in Indonesia but their position was challenged closely by XL. It is quite difficult for IM3, in this case is Indosat, to compete network strength of Telkomsel as it required huge investment in BTS deployment. So it is better for Indosat to focus on other aspect, preferably about cheap tariff. Even IM3 already had strong image on cheaper SMS, they should try to improve perception on cheaper voice call tariff. Both cheap SMS and cheap voice call tariff were the core important factors that were looked by consumers in choosing SIM card brand, other than good network.

5. 8. 3. XL

XL was the third largest operator in Indonesia and their market share was increasing in the last few years during the tariff war situation, closely challenged Indosat. Nonetheless, XL did not have particular strong image. To increase their market share, they should choose whether to focus on good network aspect or about cheap tariff. By looking at their promotional activities campaign, it seems that they were more focused on cheap tariff, which is logical, as BTS deployment required huge investment. It is better for them to continue their cheap tariff proposition, in order to improve further their market share.

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CHAPTER 6

SUMMARY AND RECOMMENDATION

6. 1. Summary

After showing the result of the research in previous chapters, following were the summary of the most important factors in selecting SIM card brands:

- The most important factors in selecting SIM card brands were:
 - Good network quality
 - Cheaper On-Net SMS tariff.
 - Cheaper voice call rate and also cheaper tariff for On-Net Calls.
- Cheaper tariff and recommendation from other people were deemed more important for younger age group (age 12-20 years old)
 - Cheaper voice call rate was deemed more important for younger age group (12-20 years old age group) than older age group (21+ years old age group). Cheaper SMS charge was deemed less important for older age consumers.
 - Network reliability features were perceived more important for older age group (21+ years old age group), than younger age group (12-20 years old age group).
- Comparing the most important factors between male and female, there was very little differentiation. The implication was there was no clear benefit could be offered by operators to attract different gender.
- Comparing the most important factors between different social class/ SES, there was very little differentiation. The implication was there was no clear benefit could be offered by operators to attract consumer in different social class segment.
- CDMA users perceived network quality was seen somewhat less important than GSM users. In addition, CDMA users perceived cheaper voice call rates and cheaper SMS tariff were more important than GSM users. Other than that, CDMA users deemed long active period and long grace period were more important than GSM users.

From the market share data, three major operators (Telkomsel, Indosat, and XL) had about 75% of the total category share. Following were the strengths and weaknesses of those three major operators:

- Telkomsel's strengths were on network reliability aspects and international call features; while their weaknesses were on interesting ads, innovation, cheaper tariff, voucher characteristics.
- Indosat's strengths were factors related to internet voucher and distribution characteristics, cheaper SMS, and interesting ads; while their weaknesses were on network aspects, has long grace period, international call features, and also good value for money.
- XL's strengths were interesting ads, offers various interesting promotions, has long grace period, variety of reload voucher values; while their weaknesses were has long active period and offers high speed internet/data access.

6. 2. Recommendation

The recommendations of the research that can be used by the mobile phone operators were:

- Rather than focusing solely on offering cheap tariff for consumers, operators should also put investment in building BTS in order to improve their network quality.
- Age of consumers was an important discrimination factor; operators should try to pursue different strategy to grab consumers from different age group.
- GSM users and CDMA users had different important factors, so operators must adjust their strategy accordingly, whether a GSM operator, or CDMA operator.
- Interesting ads were perceived not important for consumers. Put big spending on television advertising or print advertising seemed not help to increase operators' market share.

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SCREENING

- S1. Dapatkah anda sebutkan termasuk dalam kelompok manakah jumlah pengeluaran rumah tangga anda per bulannya, yaitu keseluruhan pengeluaran untuk makanan, pakaian, kendaraan/transport, listrik dan lain sebagainya per bulannya tetapi tidak termasuk pengeluaran-pengeluaran besar yang tidak tetap?

E	Kurang dari Rp. 600.000	1
D	Rp. 600.001 – Rp. 750.000	2
	Rp. 750.001 – Rp. 900.000	3
C2	Rp. 900.001 – Rp. 1.075.000	4
	Rp. 1.075.001 - Rp. 1.250.000	5
C1	Rp. 1.250.001 – Rp. 1.500.000	6
	Rp. 1.500.001 – Rp. 1.750.000	7
B	Rp. 1.750.001 – Rp. 2.125.000	8
	Rp. 2.125.001 - Rp. 2.500.000	9
A2	Rp. 2.500.001 - Rp. 3.000.000	10
	Rp. 3.000.001 - Rp. 3.500.000	11
A1	Lebih dari Rp. 3.500.000	12

Termasuk:	Tidak termasuk:
Makanan sehari-hari	Sewa bila dibayar tahunan
Listrik&air	Pembayaran cicilan
Gaji pembantu	Furniture rumah tangga
Biaya anak sekolah	Peralatan rumah tangga
Bensin	Rekreasi
Rokok	Pengeluaran tidak rutin

- S2. Berapakah usia anda saat ini?

Kurang dari 12 tahun	1	LANJUTKAN
12 - 15 tahun	2	
16 - 20 tahun	3	
21 - 25 tahun	4	
26 - 30 tahun	5	
31 - 35 tahun	6	
36 - 40 tahun	7	
41 - 45 tahun	8	
46 - 50 tahun	8	
Lebih dari 50 tahun	9	STOP INTERVIEW

- S3. Apakah saat ini anda menggunakan HP?

Ya	1	LANJUTKAN
Tidak	2	STOP INTERVIEW

- S4. Manakah dari pernyataan berikut yang paling sesuai menggambarkan keterlibatan anda dalam menentukan Kartu HP/ SIM Card yang anda gunakan saat ini?

Saya terlibat cukup besar / penuh dalam menentukan <u>Kartu HP/ SIM Card</u> yang saya gunakan	1	LANJUTKAN
Saya hanya terlibat sedikit / tidak sama sekali dalam menentukan <u>Kartu HP/ SIM Card</u> yang saya gunakan	2	STOP INTERVIEW

S5. Apakah tingkat pendidikan terakhir yang anda tamatkan?

Tidak ada pendidikan formal	1
Sekolah Dasar	2
Sekolah Menengah Pertama	3
Sekolah Menengah Atas	4
Akademi/setingkatnya	5
Universitas/ Pasca Sarjana (S1, S2, S3)	6

S6. Jenis kelamin responden.

Pria	1
Wanita	2

MAIN QUESTIONNAIRE

Q1. Diantara merek kartu HP berikut ini, merek manakah yang anda tahu, pernah dengar, atau pernah lihat? Tidak masalah jika anda belum pernah menggunakannya, kami hanya ingin tahu apakah anda mengetahuinya atau tidak.

Q2. Kartu HP manakah yang anda gunakan sekarang ini? Apabila Anda menggunakan lebih dari 1 kartu HP, mohon beritahukan kami semua merek kartu HP yang anda gunakan.

	Q1. Merek yang diketahui	Q2. Merek yang digunakan
GSM		
IM3	1	1
Matrix	2	2
Mentari	3	3
XL Prabayar	4	4
XL Pascabayar	5	5
Kartu Halo	6	6
Simpati	7	7
Kartu As	8	8
Tri (3) (pra-bayar/isi ulang)	9	9
Tri (3) (pasca-bayar/langganan/bayar bulanan)	10	10
Axis	11	11
CDMA		
Flexi Trendy (pra-bayar/isi ulang)	21	21
Flexi Classy (pasca-bayar/langganan/bayar bulanan)	22	22
Esia (pra-bayar/isi ulang)	23	23
Esia (pasca-bayar/langganan/bayar bulanan)	24	24
Fren (pra-bayar/isi ulang)	25	25

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Questionnaire for The Research

Fren (pasca-bayar/langganan/bayar bulanan)	26	26
StarOne/Jagoan (pra-bayar/isi ulang)	27	27
StarOne/Jagoan (pasca-bayar/langganan/bayar bulanan)	28	28
Smart (pra-bayar/isi ulang)	29	29
Hepi	30	30
Lainnya _____	X	X
Lainnya _____	X	X
Lainnya _____	X	X

Q3. Saya akan membacakan beberapa pernyataan yang biasa digunakan untuk menilai operator dari suatu Kartu HP. Seberapa penting atau tidak pentingkah pernyataan-pernyataan berikut ini untuk Anda? Mohon berikan jawaban dengan menggunakan skala 1 sampai dengan 5, dimana 5 adalah nilai yang paling tinggi (paling penting).

	Sama sekal i tidak pent ng	Sedik it pent ng	Penti ng	Sang at pent ng	Sang at pent ng sekal i
Jangkauan nasionalnya luas / Good national coverage	1	2	3	4	5
Signalnya kuat dan jelas di <u>luar</u> gedung / Strong and clear signal outdoor	1	2	3	4	5
Signalnya kuat dan jelas di <u>dalam</u> gedung/ Strong and clear signal indoor	1	2	3	4	5
Memiliki kualitas suara yang baik (suaranya jelas, tidak berisik, tidak terputus-putus)/ Good call quality	1	2	3	4	5
Sambungannya tidak terputus-putus ketika menelpon/ No call drops	1	2	3	4	5
Telepon langsung tersambung (mudah tersambung tanpa ada nada sibuk terlebih dahulu)/ Easy network access to make calls	1	2	3	4	5
Tidak ada keterlambatan dalam pengiriman dan penerimaan SMS/ No time lag in sending and receiving SMS	1	2	3	4	5
UNTUK PRABAYAR: Vouchernya tersedia dimana-mana (voucher mudah didapat) UNTUK PASKABAYAR: Banyak pilihan cara/tempat pilihan pembayaran Voucher is easily available	1	2	3	4	5
UNTUK PRABAYAR: Memiliki banyak pilihan untuk voucher isi ulang/ Variety of reload voucher values	1	2	3	4	5
UNTUK PRABAYAR: Memiliki denominasi (jumlah nominal) voucher yang lebih murah/ Cheaper voucher price denomination	1	2	3	4	5
UNTUK PRABAYAR: Tidak ada keterlambatan pada saat mengisi ulang/ No time lag in reloading	1	2	3	4	5
Selalu memiliki fitur-fitur baru yang menarik/ Always has new interesting features	1	2	3	4	5
Memiliki fitur-fitur yang terdepan/terbaru dalam teknologi/ Has features that are the most advance/latest in technology	1	2	3	4	5
Menawarkan akses internet/data yang berkecepatan tinggi/ Offers high speed internet/data access	1	2	3	4	5

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	Sama sekali tidak pentin g	Sedik it penti ng	Penti ng	Sang at penti ng	Sang at penti ng sekal i
UNTUK PRABAYAR: Masa aktifnya panjang/lama/ Has long active period	1	2	3	4	5
UNTUK PRABAYAR: Masa tenggangnya panjang/lama/ Has long grace period	1	2	3	4	5
Harga yang dibayarkan sesuai dengan mutu yang didapatkan/ Good value for money	1	2	3	4	5
Tarif telepon lebih murah/ Cheaper voice call rates	1	2	3	4	5
Tarif SMS lebih murah/ Cheaper SMS charges	1	2	3	4	5
Tarif telepon lebih murah ke sesama pengguna Kartu HP yang sama/ Cheaper tariff for on-net calls	1	2	3	4	5
Tarif SMS lebih murah ke sesama pengguna Kartu HP yang sama/ Cheaper tariff for on-net SMS	1	2	3	4	5
Tarif roaming <u>nasionalnya</u> murah atau gratis/ Has cheap rate for national roaming	1	2	3	4	5
Tarif telepon lebih murah ke luar negeri/ Cheaper rates to call overseas	1	2	3	4	5
Tarif untuk download ring tone, games, m-banking, info dll lebih murah/ Cheaper rates for Value-Added Services	1	2	3	4	5
Tarif untuk akses data (internet) lebih murah/ Cheaper rates for internet access	1	2	3	4	5
Customer servicenya cepat menyelesaikan masalah dan keluhan-keluhan pelanggan/ Is quick to resolve problems and complaints	1	2	3	4	5
Customer servicenya mudah dihubungi/ditemui/ Ease of contacting customer service	1	2	3	4	5
Customer servicenya ramah/ Friendly customer service	1	2	3	4	5
Menawarkan berbagai promosi/bonus yang menarik/ Offers various interesting promotions	1	2	3	4	5
Iklan-iklannya menarik/ Interesting ads	1	2	3	4	5
Direkomendasikan oleh teman / keluarga saya/ Recommended by my friends / families	1	2	3	4	5
Kualitas telepon ke luar negeri yang bagus/ Good international call quality	1	2	3	4	5

- Q4. Sekarang saya akan membacakan kepada Anda beberapa pernyataan yang menggambarkan merek-merek KARTU HP. Setiap saya bacakan satu pernyataan, tolong katakan pada saya merek mana yang Anda rasa cocok/sesuai dengan pernyataan tersebut. Tidak masalah jika merek tersebut belum pernah Anda gunakan.
Anda boleh menyebutkan sebanyak atau sesedikit mungkin merek, selama itu Anda rasa sesuai dengan pernyataan tersebut. Atau bahkan jika Anda rasa sama sekali tidak ada merek yang cocok/ sesuai dengan pernyataan tersebut, silahkan Anda katakan bahwa tidak ada yang cocok.

Seandainya Anda hendak membeli merek KARTU HP yang _____ (SEBUTKAN PERNYATAANNYA), merek mana yang akan Anda pilih? Apa lagi?

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Questionnaire for The Research

	Q4														
	IM3	Matri x	Ment ari	XL	Kartu Halo	Simp ati	Kartu As	Tri (3)	Axis	Flexi	Esia	Fren	Star One	Smar t	Hepi
Jangkauan nasionalnya luas / Good national coverage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Signalnya kuat dan jelas di <u>luar</u> gedung / Strong and clear signal outdoor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Signalnya kuat dan jelas di <u>dalam</u> gedung/ Strong and clear signal indoor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Memiliki kualitas suara yang baik (suaranya jelas, tidak berisik, tidak terputus-putus)/ Good call quality	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sambungannya tidak terputus-putus ketika menelpon/ No call drops	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Telepon langsung tersambung (mudah tersambung tanpa ada nada sibuk terlebih dahulu)/ Easy network access to make calls	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tidak ada keterlambatan dalam pengiriman dan penerimaan SMS/ No time lag in sending and receiving SMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UNTUK PRABAYAR: Vouchernya tersedia dimana-mana (voucher mudah didapat) UNTUK PASKABAYAR: Banyak pilihan cara/tempat pilihan pembayaran Voucher is easily available	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UNTUK PRABAYAR: Memiliki banyak pilihan untuk voucher isi ulang/ Variety of reload voucher values	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UNTUK PRABAYAR: Memiliki denominasi (jumlah nominal) voucher yang lebih murah/ Cheaper voucher price denomination	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UNTUK PRABAYAR: Tidak ada keterlambatan pada saat mengisi ulang/ No time lag in reloading	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Selalu memiliki fitur-fitur baru yang menarik/ Always	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

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Questionnaire for The Research

	Q4														
	IM3	Matri x	Ment ari	XL	Kartu Halo	Simp ati	Kartu As	Tri (3)	Axis	Flexi	Esia	Fren	Star One	Smart t	Hepi
has new interesting features															
Memiliki fitur-fitur yang terdepan/terbaru dalam teknologi/ Has features that are the most advance/latest in technology	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Menawarkan akses internet/data yang berkecepatan tinggi/ Offers high speed internet/data access	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UNTUK PRABAYAR: Masa aktifnya panjang/lama/ Has long active period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UNTUK PRABAYAR: Masa tenggangnya panjang/lama/ Has long grace period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Harga yang dibayarkan sesuai dengan mutu yang didapatkan/ Good value for money	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif telepon lebih murah/ Cheaper voice call rates	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif SMS lebih murah/ Cheaper SMS charges	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif telepon lebih murah ke sesama pengguna Kartu HP yang sama/ Cheaper tariff for on-net calls	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif SMS lebih murah ke sesama pengguna Kartu HP yang sama/ Cheaper tariff for on-net SMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif roaming <u>nasionalnya</u> murah atau gratis/ Has cheap rate for national roaming	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif telepon lebih murah ke luar negeri/ Cheaper rates to call overseas	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif untuk download ring tone, games, m-banking, info dll lebih murah/ Cheaper rates for Value-Added Services	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tarif untuk akses data (internet) lebih murah/ Cheaper rates for internet access	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Customer servicenya cepat menyelesaikan masalah	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

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	Q4														
	IM3	Matri x	Ment ari	XL	Kartu Halo	Simp ati	Kartu As	Tri (3)	Axis	Flexi	Esia	Fren	Star One	Smar t	Hepi
dan keluhan-keluhan pelanggan/ Is quick to resolve problems and complaints															
Customer servicenya mudah dihubungi/ditemui/ Ease of contacting customer service	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Customer servicenya ramah/ Friendly customer service	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Menawarkan berbagai promosi/bonus yang menarik/ Offers various interesting promotions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Iklan-iklannya menarik/ Interesting ads	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Direkomendasikan oleh teman / keluarga saya/ Recommended by my friends / families	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

***** TERIMA KASIH *****

Universitas Indonesia

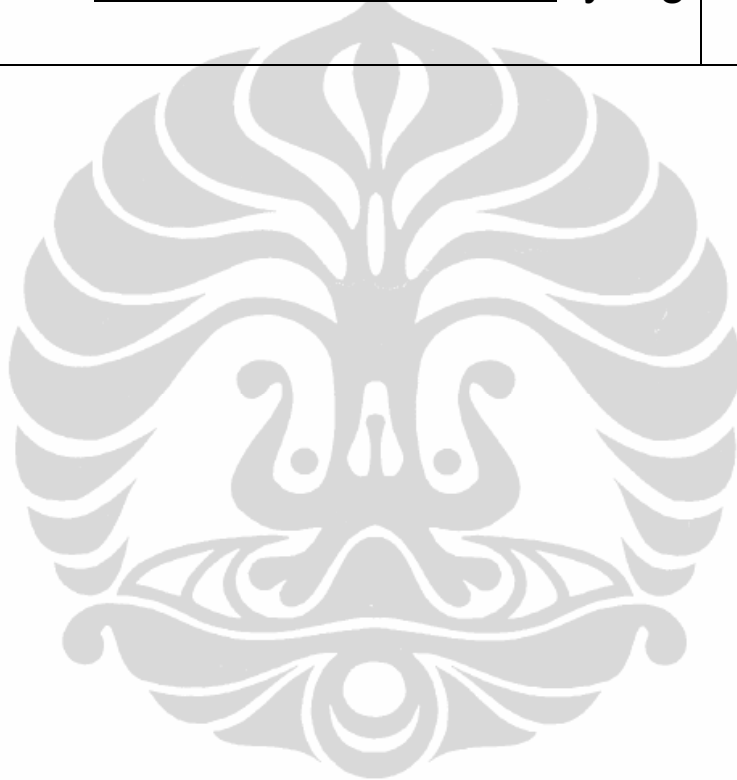
KARTU BANTU S1

Kurang dari Rp. 600.000	1
Rp. 600.001 – Rp. 750.000	2
Rp. 750.001 – Rp. 900.000	3
Rp. 900.001 – Rp. 1.075.000	4
Rp. 1.075.001 - Rp. 1.250.000	5
Rp. 1.250.001 – Rp. 1.500.000	6
Rp. 1.500.001 – Rp. 1.750.000	7
Rp. 1.750.001 – Rp. 2.125.000	8
Rp. 2.125.001 - Rp. 2.500.000	9
Rp. 2.500.001 - Rp. 3.000.000	10
Rp. 3.000.001 - Rp. 3.500.000	11
Lebih dari Rp. 3.500.000	12

Termasuk:	Tidak termasuk:
Makanan sehari-hari	Sewa bila dibayar tahunan
Listrik&air	Pembayaran cicilan
Gaji pembantu	Furniture rumah tangga
Biaya anak sekolah	Peralatan rumah tangga
Bensin	Rekreasi
Rokok	Pengeluaran tidak rutin

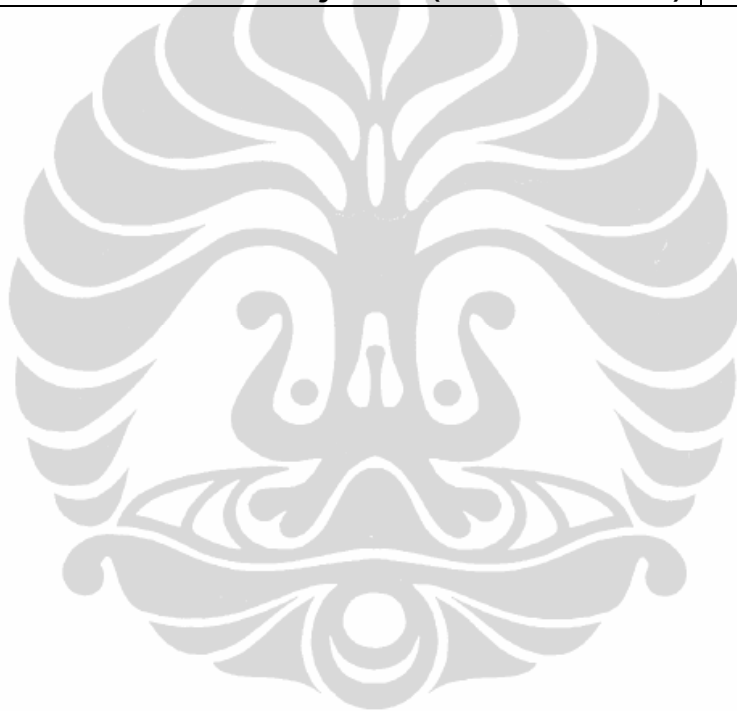
KARTU BANTU S4

Saya terlibat cukup besar / penuh dalam menentukan <u>Kartu HP/ SIM Card</u> yang saya gunakan	1
Saya hanya terlibat sedikit / tidak sama sekali dalam menentukan <u>Kartu HP/ SIM Card</u> yang saya gunakan	2

















KARTU BANTU S5

Tidak ada pendidikan formal	1
Sekolah Dasar	2
Sekolah Menengah Pertama	3
Sekolah Menengah Atas	4
Akademi/setingkatnya	5
Universitas/ Pasca Sarjana (S1, S2, S3)	6

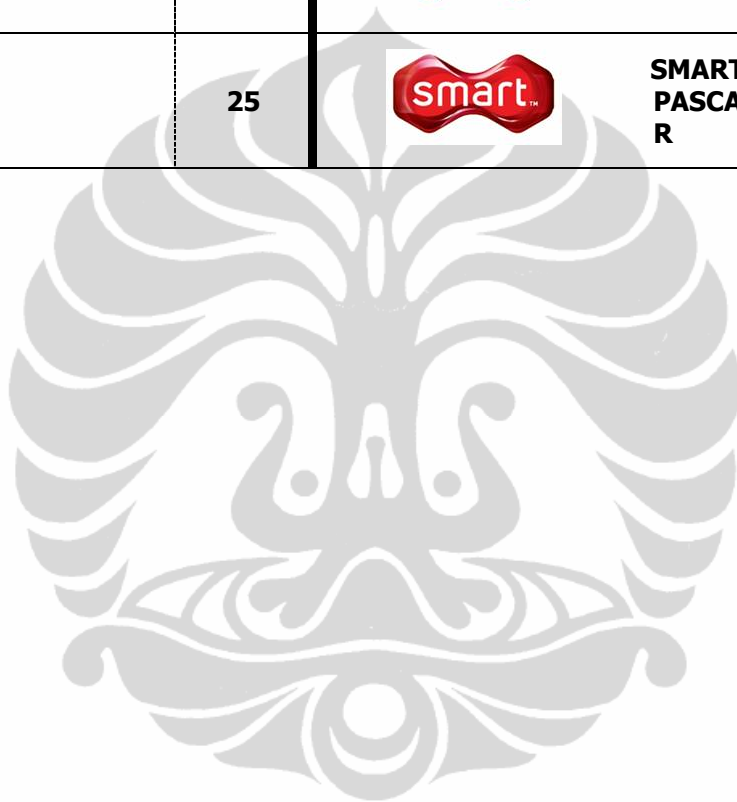


KARTU BANTU Q1, Q2, Q4

	Flexi	51		61	
	PRABAYAR	52		PRABAYAR	62
	PASCABAYAR	53		PASCABAYAR	63
	TRI	111		81	
	TRI PRABAYAR	112		PRABAYAR	83
	TRI PASCABAYAR	113		PASCABAYAR	84
	AXIS	125		71	
		31		PRABAYAR	72
		32		PASCABAYAR	73
		33		IM3	12
		74		Matrix	14

KARTU BANTU Q1, Q2, Q4 (cont'd)

	23		Mentari	15
	24		SMART	93
	25		SMART PASCABAYA R	94



KARTU BANTU Q3

Sama sekali tidak penting	1
Sedikit penting	2
Penting	3
Sangat penting	4
Sangat penting sekali	5

