



UNIVERSITI PUTRA MALAYSIA

***CONSUMER'S CHOICE AND DECISION MAKING OF MOBILE PHONE
SERVICE OPERATOR***

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**CONSUMER'S CHOICE AND DECISION MAKING OF
MOBILE PHONE SERVICE OPERATOR**

By

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DECLARATION

I hereby declare that the project paper is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Putra Malaysia or any other institutions.

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**CONSUMER CHOICE AND DECISION MAKING OF MOBILE PHONE
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SITI KHAIRULNUR AZLINDA BT. KHAIRUDDIN

ABSTRACT

Previously, the Malaysian telecommunication industry was monopolised by Telekom Malaysia Berhad, but now with four other main players in the field, consumers are at the advantage of having loathed of choices. Basically the objective of this study is to determine factors that consumers take into consideration when they evaluate among the choices before deciding which of the mobile phone service operators that they will subscribe to. The study was conducted in Klang Valley area. The convenience sampling technique was utilised in identifying the sample, which consists of 200 respondents that owned a mobile phone. Data for the study were collected through personal interview via structured

questionnaire. The data were analysed using t-test and analysis of variance. From the three factors of service quality, price and brand image being examined in this study, it was found that service quality has the most influence on consumer's choice of mobile phone service operators, mainly on the wide coverage area provided coupled with good transmission and receptions, followed by price and brand image that was considered as not so important in the consumer's point of view. Thus, mobile phone service operators should revise the quality of the service that they are currently providing their customers with, as this might be the means to increase their subscriber base.

**KEPUTUSAN DAN PEMILIHAN OPERATOR PERKHIDMATAN
TELEFON BIMBIT OLEH PENGGUNA**

SITI KHAIRULNUR AZLINDA BT. KHAIRUDDIN

ABSTRAK

Sebelum ini industri telekomunikasi di Malaysia di monopoli oleh Syarikat Telekom Malaysia Berhad. Walaubagaimanapun, semenjak kehadiran empat lagi operator di dalam industri ini, para pengguna mempunyai kelebihan untuk memilih operator telekomunikasi yang ingin mereka gunakan perkhidmatannya. Tujuan kajian ini dilakukan adalah untuk menentukan faktor yang diambil kira oleh pengguna semasa membuat pemilihan di antara operator perkhidmatan telefon bimbit. Kajian ini telah dijalankan di sekitar kawasan Lembah Klang. Sampel kajian ini terdiri daripada 200 orang yang memiliki telefon bimbit. Data untuk kajian ini diperolehi melalui temubual secara individu yang menggunakan

perantaraan kertas soal selidik. Bagi tujuan analisis data yang telah diperolehi, kami telah menggunakan teknik 't-test' dan 'analysis of variance'. Keputusan yang diperolehi menunjukkan bahawa daripada tiga factor yang di kaji iaitu kualiti perkhidmatan, harga, dan jenama, pengguna lebih tertumpu kepada kualiti perkhidmatan yang disediakan oleh operator telefon bimbit di dalam proses membuat pemilihan operator telefon bimbit yang bakal mereka gunakan. Antara kualiti yang diambilkira oleh pengguna adalah kawasan liputan yang luas dengan kemampuan penerimaan and transmisi yang baik. Harga merupakan factor kedua terpenting yang diambilkira oleh pengguna dalam proses membuat pemilihan. Secara keseluruhannya pengguna berpendapat bahawa jenama sesebuah operator perkhidmatan telefon bimbit adalah kurang penting. Berdasarkan keputusan yang diperolehi, operator perkhidmatan telefon bimbit sepatutnya menilai semula kualiti perkhidmatan yang mereka telah sediakan kepada pengguna mereka dan mengambil peluang untuk memperbaiki kelemahan mereka dari segi kualiti perkhidmatan. Memandangkan faktor ini mungkin dapat membantu mereka untuk meningkatkan bilangan pelanggan di masa hadapan.

CHAPTER ONE

1.0 Introduction

Chapter one will briefly discuss on the Malaysian telecommunication industry, definition of the terms relevant to the title of the study, the problem statement, the objective of the study, the hypotheses and the significance of the study.

1.1 Genesis of the Service Industry

Service Industries are playing an increasingly important role in the world economy. Many countries have large proportion of the population being employed in the service sector thus contributing to a large percentage of their Gross Domestic Product (GDP). Income from the service sector currently accounts for 58% of the total worldwide Gross National Product (GNP).

Traditionally, service has been regarded as a residual sector of economy. In the three sector economy where at different stages, economic activities would shift from primary to the secondary and finally to the tertiary sector. However, in actual sense, services are neither of lesser size nor of lesser importance than other sector, nor do they parasitically dependent on manufacturing activities. Rather, services

are industries that play a vital and dynamic role in any functioning economy that stimulates growth in other sectors.

Under the New Development Policy (The second Outline Perspective Plan 1991-2000), Malaysia's service sector developed as an important sector generating growth and employment in the economy as well as reducing large deficits in the service accounts balance of payments. Special emphasis on expansion will be placed on the emerging subsectors of computer services, financial services, stock broking and tourism, as well as business, professional and consultancy services.

In 1998, the service sector in Malaysia constituted 44.9% of total GDP as compared to 42.5% in 1990. The wholesale and retail trade, hotels and restaurants subsectors contribute most to the total share of services with 26.1% followed by government services with 25.4%. The rest are contributed by finance, real estate and business services (22.8%), transport, storage and communication (16.2%), "other services" (14.9%) and electricity, gas and water (4.6%)

1.2 Overview of Malaysian Telecommunication Industry

Telecommunication services in Malaysia have been provided and regulated by the Government since the first telephone was introduced in 1874. In 1968, the Telecommunications Department in Peninsular Malaysia was merged with that of Sabah and Sarawak to form Jabatan Telekom Malaysia. Syarikat Telekom

Malaysia Berhad, the successor to Jabatan Telekom Malaysia was corporatised on the 1st of January 1987. Syarikat Telekom Malaysia Berhad was formed to take over the commercial functions of Jabatan Telekom Malaysia. While Jabatan Telekom Malaysia becomes the Government's regulatory body to oversee the telecommunication industry that functions within the Ministry of Energy, Telecommunication and Post. The Ministry of Energy, Telecommunication and Post is responsible for planning and formulating national policy with respect to the telecommunications operators. Since then, the industry began its transformation from a monopoly to a more competitive and deregulated structure as seen today.

Syarikat Telekom Malaysia, which was privatised in 1987 and listed in the main board of Kuala Lumpur Stock Exchange in 1990, changed its name to Telekom Malaysia Berhad. With liberalisation in this industry, many new key players have made their presence felt, such as: Celcom, Time Telekom, Binariang, and others. The overall economic downturn that has affected the country in late 1997 has

resulted in the bearish stock market, depreciation in the value of ringgit (RM) and a downward revision of around 2.5% economic growth rate for the 1998. All these contributed to an unfavourable financial impact on telecommunication players in Malaysia, especially to the new entrants.

In 1997, competition was particularly tough in the mobile phone sector. All the five operators (DiGi Swisscom Bhd, Time Engineering Bhd, Celcom, Maxis Communication Bhd, Time Wireless Sdn Bhd) were heavily subsidized to attract new customers and to promote their products. The total number of active mobile phone customers in Malaysia at the end of the year 1999 was estimated to be about 2 millions.

1.3 Overview of Malaysian Mobile phone Telecommunication Industry

The local telecommunication industry is being driven by a highly dynamic mobile phone market, which is set to grow at 26 per cent in the year 2000, much faster than fixed lines. A penetration rate of 16 per cent (16 mobile phone for every 100 populations) is anticipated. The mobile pie has a huge potential and can be extremely rewarding to those who have a right strategy in place. Its subscriber base is expected to increase to 3.5 million from the current of 2.8 million by year-end.

While a few of the telecommunications companies (telcos) have reached the critical size in mobile phone subscriber base to start generating marginal profits, the rest are staggering along, registering lower returns than the cost of the capital invested. As a result, the local mobile market will continue to witness cutthroat competition in the year ahead with telcos figuring ways to retain their subscriber base while vying for new ones. They acknowledge that it is more difficult to retain subscribers than vie for new ones.

Technological change is another major factor that the telcos have to look out for, as new technology will directly affect their operations, both in terms of revenue and services offered (including efficiency and speed). By the year of 2020, Malaysia is expected to have 6.5 million lines and an increased capital about 2.5 times to RM13 billion. These investments are necessary to achieve the government's target to increase the penetration rate to 50 telephones per 100 populations by the year 2020. Ultimately, to survive, telcos would need to make large investments in infrastructure and keep up with the latest technology, while at the same time being able to offer a wide variety of services at reasonable prices. In short, heavy business volume at low costs is a priority if telcos want to thrive.

Without consolidation in the industry, the telcos in the mobile war will certainly have a rough ride and some will certainly going to be thrown into the dust. With the developments in technology, switching services is as easy as a changing a little

card with an embedded chip. That can mean only one thing, the operator with the best service and value 'for money will win the mobile war.

1.3.1 Mobile phone Telecommunication Industry

Few years ago there were eight companies in the local telecommunications industry. But now there are only five main players. Although market prospects are still lucrative, weaker players had to be taken over by companies with greater financial muscle. Telecommunication is still a high growth industry, which was relatively unaffected even during the recent recession. Continuous rollout of new technologies and the convergence of telecommunications, Internet and media have eroded the domination of the old guards in a particular segment. In the era of liberalization and more licenses, telecommunications companies are forced to be more responsive to market forces. Hence, growing in size and cross-selling services are some keys to survival. The faster telcos respond to market forces the more likely they are to have the leading edge. In the long run, the need to acquire and use new technologies precedes everything else as we move into the next generation of wireless services and technology.

These are the five major players in the local telecommunication industry. All the five players have licenses for fixed line networks, international gateways, mobile networks and Internet service provider (ISP).

1.3.1.1 Telekom Malaysia Berhad

Telekom Malaysia Bhd was incorporated in 1990 to take over the operations of Jabatan Telekom Malaysia under the government's privatisation programme. Telekom was the sole provider of telephone services before the birth of Celcom in 1989 when the government decided to liberalise the telecommunication industry. Telekom has been monopolising the industry with 80 percent of its income coming from its fixed line services. Currently, Telekom has 4.52 million fixed line subscribers that translate into almost 99 per cent of the total fixed line market. In the mobile sector, Telekom has three networks: the automatic telephone using ATUR 450 (Nordic Mobile Telephone-011) launched in January 1995; TMTouch (a personal communications network -013); and Mobifon launched in June 1994 (Advanced Mobile Phone System (AMPS)/ digital advanced mobile phone system (DAMPS) network-018). Telekom is aggressively marketing its value added services. Telekom's paid-up capital is RM3 billion and share holders fund stood at RM12.03 billion for FY ended Dec 31,1998. Its major shareholders are Khazanah Nasional Bhd (38.88 per cent), Ministry of Finance (Incorporated) (21.7 per cent), Employees Provident Fund (nine per cent) and Bank Negara Malaysia (6.2 per cent).

1.3.1.2 Technology Resources Industries Bhd (TRI)

TRI made its first strategic move into the telecommunications industry in 1993 via the acquisition of a 100 per cent stake in Alpine Resources, which in turn owned a 51 per cent stake in Cellular Communications Network Sdn Bhd (Celcom). Subsequently, TRI acquired the remaining 49 per cent stake. Celcom launched its analogue service in August 1989 and became the first operating cellular player in the country. It launched its GSM mobile services in September 1995.

With its lead in mobile service operations, Celcom broke the one million subscriber base mark last October, positioning it among the biggest cellular companies in Asia and undoubtedly the largest in Malaysia. Celcom operates two mobile networks, automatic radio telephone ART 900 (extended total access communication system -010) and Celcom GSM (global system for mobile communication network-019). Apart from its fixed line network, Celcom launched its ISP services, GSM Internet services in November 1999. TRI has a paid-up capital of RM754.9 million and its shareholders fund for FY ended Dec 31, 1998 was RM969.3 million. Its major shareholders are Arah Murni Sdn Bhd (26.9 per cent) and Deutsche Telekom AG (20.8 per cent).

1.3.1.3 Maxis Communication Bhd

Maxis Communications, formerly known as Binariang Bhd, switched names to build on the success of the Maxis band name. Maxis Mobile Sdn Bhd launched its services in August 1995 (GSM network-012). It launched SmartAccess, the Maxis equal access service, in February 1999 and its ISP services on October 1999 for business customers. Maxis Mobile also launched Hotlink, Maxis prepaid service, on October 1999.

The group is aggressively promoting its ISP services. It is second in the mobile telecommunications market and has the largest digital network. The major shareholder of Maxis Communications is Usaha Tegas (49 per cent). Tycoon T Ananda Krishnan is the major shareholder of Usaha Tegas. British telecommunications plc acquired 33.3 per cent stake in Maxis Communications in October 1998 for RM 1.8 billion. Following the acquisition, the MEASAT operations were spun off as a separate entity known as Binariang Satellite System Sdn Bhd. The other shareholders are MediaOne International of United States (12.6 per cent) and Permodalan Nasional Bhd (5 per cent)

1.3.1.4 DiGi Swisscom Bhd

DiGi Swisscom Bhd was formerly known as Mutiara Swisscom Bhd. DiGi Telecommunication Sdn Bhd, its telecommunications arm, first launched its mobile services under the brand name DiGi 1800 in May 1995. DiGi Telecom operates DiGi 1800 (a personal communication network-016). The company was the first to launch the highly popular prepaid mobile phone service in January 1998 and has capitalised on the low-usage prepaid market making itself a niche player. It launched its fixed line services in November 1998 and its ISP services are yet to be launched.

The group's cellular division that pioneered DiGi prepaid subscriber cards has 70 per cent of the prepaid subscriber market. As at mid-1999, DiGi's prepaid subscriber base was estimated at 380,000. Even though other players have introduced competing prepaid packages, its prepaid service will greatly reduce the group's bad debts. The prepaid service was the primary drive, which made DiGi the third largest cellular player after Celcom and Maxis. Its major shareholders are Telenor International AS (30 per cent), Berjaya VTCY Sdn Bhd (17.63 per cent), the head of Berjaya Group, Tan Sri Vincent Tan (10.64 per cent) and Inter Pacific Capital Sdn Bhd (2.32 per cent)

1.3.1.5 Time Engineering Bhd

Time Engineering Bhd operates Adam (a personal communications network – 017), which it bought over from Sapura Digital, the telecommunications arm of Sapura Holdings Bhd in 1997, paying RM750 million for a 75 per cent stake. Adam was launched in August 1995. Time Engineering Bhd fixed line services was launched in March 1996 but its full-scale activities to promote the service started only in 1999. It also launched its ISP service on December 1999. Time Engineering Bhd paid-up capital is RM746.4 million while the shareholders' fund stands at RM355.9 million as at Dec 31, 1998. The major shareholders of Time Engineering Bhd are Renong Bhd (46.77 per cent) and Time Investment (Cayman) Ltd (15.01 per cent)

Number of subscribers Mobile phone Network as at January, 2000

TELCO	SUBSCRIBERS	MARKET SHARE	SERVICE COMMENCEMENT
Celcom	800,000	26.96%	ART9000, August 1989
	250,000	8.43%	Celcom GSM, Sept 1995
Total	1,050,000	35.4%	
Maxis	780,000	26.3%	August 1995
DiGi	540,000	18.2%	May 1995
Adam	200,000	6.7%	August 1995
TMTouch	205,000	6.9%	June 1995
Mobikom	130,000	4.4%	June 1994
ATUR	60,000	2.0%	January 1985
Total	2,965,000	(100%)	

Source: TA Securities Bhd

1.3.2 Equal Access

January 1, 1999 has witnessed a new beginning for a new era in Malaysian Telecommunication industry with the implementation of Equal Access. The move signals substantial changes for telecommunication service users and for telecommunications companies as well.

It has been the intention of the Malaysian Government, that Malaysia's telecommunication industry should follow the global trend of liberalisation. This intervention by the government is a move in the right direction as it will, hopefully, promote free and fair competition and push the industry into modernising and keeping up with the latest technology. Through equal access, licensed network operators are required to interconnect with all other networks and provide unrestricted access across networks for competing services. It is a decision that will open up the market to competition and offer consumers accessibility to different service operators.

Equal Access means that the Malaysian fixed line telecommunications market will be opened up to competition from several network operators. The new operators in the market achieve this by interconnecting their networks to each other.

The ultimate beneficiary is to be the consumer as costs are brought down as efficiencies go up and new technologies are adopted. But the flip side is that the consumer can no longer expect any cross subsidising of services where profits from one area are used to offset losses in another. The current practice of cross subsidising is a legitimate gripe for Telekom, which has invested substantially in infrastructure to wire the entire country.

The services that will fall within the scope of Equal Access are essentially long distance calls and international calls from fixed lines to fixed lines. They include calls that originate from and transmitted to telephone, facsimile, Private Branch Exchange (PABX), key telephones and Centralise Exchange (Centrex).

The equal access codes currently used are:

- ❖ Telekom Malaysia (181)
- ❖ MaxisAccess (182)
- ❖ TimeAccess (183)
- ❖ DiGiAccess (186)
- ❖ CelcomDial (189)

A year after equal access (EA) which allow telephone subscribers the right to use a long distance or international operator of their choice via the dialling of a code, the industry is still plagued by a myriad of problems which threatens to abort the promise of better service and low costs. Clear over capacity in the provision of

trunk lines and international access has raised the problem of undercutting as new comers drop their rates to get any capacity they can on their considerably under utilised but very expensive networks.



1.4 Definition

This study emphasises on the consumers with the main focus on factors that they took into account in evaluating the choices they have before subscribing to a particular service operator. Therefore, it is essential to clarify the terms used for a better understanding of the matter concerned.

1.4.1 Mobile phone Service Operator

1.4.1.1 Major mobile phone service operator in Malaysia

The major mobile phone service operators that have been identified are as follows:

Company	Name of System	Code Number
Technologies Resources Industries Bhd	ART 900	010
	Celcom GSM	019
DiGi Swisscom Bhd	DiGi 1800	016
Telekom Malaysia Bhd	TM Touch	013
Maxis Communication Bhd	Maxis Mobile	012
Time Engineering Bhd	ADAM	017

1.4.1.2 Marketing Strategy

Following the recent deregulation of mobile phone tariffs on 1st August 2000, local telcos are involved in an all-out battle to win customers. They now offer a bewildering variety of call packages, targeting specific market segments by varying access fees and airtime charges.

Currently, the mobile phone network companies is investing heavily in sales and promotional activities in order to compete with each other and to attract the consumers attention towards their network services.

The companies try to differentiate their services from those of competitors by bring out some uniqueness in their services. For example: ADAM/TimeCel is promoting itself as an economical product where by the price that the consumers have to pay for the services rendered by the company is less than those of other service operators.

Celcom is attracting consumer's interest via providing reliable network coverage, covering over 90% of Malaysia's populated areas. This means that the consumers will enjoy coverage virtually anywhere, including highways, urban and rural areas, whether they are indoors or outdoors. DiGi 1800 on the other hand is trying to

build consumers interest in their product by providing extra consumer benefits that are unique from those of competitor such as:

- i. 16 days buy back guarantee
- ii. Phone upgrade programme
- iii. 7-Day Replacement Guarantee
- iv. Loan-A-Phone Programme
- v. Lost & Stolen Programme

While Maxis make itself unique by becoming the leader in automatic international roaming. Roaming currently extends to 58 countries worldwide with a link-up of 94 networks. An added advantage of this link-up is that Maxis customers can use their existing phone number with the facility.

The latest strategy that has been adopted by most mobile phone service operators in their effort to attract new subscribers is via giving the consumers a chance to subscribe to their network without any registration fee and this strategy has received a tremendous whelm from the consumers.

1.4.2 Prepaid versus Post-paid

Currently the users of mobile phone have the options to paying their phone bills via two types of billing system, the post-paid and the pre-paid method. The Post-paid billing system is the normal way of bills handling by the mobile phone service operators, whereby the user will be charged for the calls made after the services have been rendered on monthly basis. While the pre-paid billing system insists on the users of mobile phone to buy the airtime before they are able to make any phone call via their mobile phone. The pre-paid option is perceived to be an economical especially for the low-usage subscriber. Since the introduction prepaid billing system by DiGi.Com in January 1998 it has received an overwhelming support by the users of mobile phone users. Table A shows the monthly subscriber growth from January to June 2000. Table B indicates the differences between Post-paid and Pre-paid billing system

Table A: Monthly Subscriber Growth (January to June 2000)

	TM Touch	Maxis	DiGi	Celcom	TimeCel/ Adam	Mobikom
Prepaid	21,398	43,333	27,016	30,770	13,333	2,582
Postpaid	16,457	(15,000)	(230)	(5,456)	-	(987)
Net Subscriber Growth	37,855	28,333	26,786	25,314	13,333	1,594

Source: Cellular operators, RHB Research Institute Sdn Bhd

Table B: Post-paid versus Pre-paid for the Operator

	Post-paid	Prepaid
Acquisition Cost	RM400-RM700 per subscriber for handset, airtime subsidy and dealer commissions.	The RM120 charge per pre-paid start-up kit covers all costs, dealer commissions and airtime.
Contract period	6-12 months depending on extent of subsidy	Zero
Billing cost	Billing and related expenses	Zero
Bad debts	8-12% of post-paid revenue	Zero
Customer profile	Detailed profile is obtained during application	Zero
ARPU per month	RM93 to RM185	RM50 to RM80
EBITDA/user/year	RM600-RM700	RM400-RM450
Acquisition cost recovery period (handset subsidy + commissions/EBITDA per month)	6-12 months	Zero
ARPU: Average revenue per unit		

Source: Cellular operators, RHB Research Institute Sdn Bhd

1.4.3 Consumer Choice Evaluation Process

Consumer is defined as person who buys goods or uses services. Consumers went through a series of decision-making process as they acquire, consume, and use products, services, and ideas. Five decision-making stages have been identified: problem recognition, search, alternative evaluation, choice/decision and post-acquisition evaluation process. In this study we will only look at how consumers evaluate choices that they have in choosing which of the mobile phone service operators should they subscribe to based on their expectation towards the criteria's that service operator should have for their product. When planning to subscribe to a particular mobile phone service operator, consumers might evaluate these criteria's:

- i. Quality of the service provided in terms of cost, coverage, benefits that they get from that particular service operator.
- ii. The utmost value of money that they gain from purchasing that particular service.
- iii. Satisfaction pertaining to subscribing to a particular network provider due to its brand image.



1.5 Problem Statement

It is not a network game anymore. The telecommunication industry is now a service industry. Previously, The Malaysian telecommunication industry was monopolised by Telekom Malaysia Berhad, but now with four other players in the field, consumers are at the advantage of having loathed of choices. Basically in this study, we will look into factors that consumers take into consideration when they evaluate among the choices before deciding which of the mobile phone service operators will they subscribe to.

The desire to convince and persuade the fickle customer will push the mobile phone service operators in the industry to be more competitive and constantly improve services.

Mobile phone service operators are competing with each other via delivering higher level of service quality inclined to position themselves more effectively in the market place. However, service quality is such an elusive and abstract constant that it is difficult to define and measure. The mobile phone service operators did each and everything, which they believed, will create values to their product in their effort to impress and tackle the consumers.

However, everything that they do is based on what they believed the consumers want and/or need, but what actually that the consumers want and/or need?, what are the things that they perceived as quality?, and this is what we want to find in this study.

Following the deregulation of mobile phone tariffs on the 1st of August 2000, local telecommunication companies (telco) are involved in an all-out battle to win customers. They are now offering a bewildering variety of call-packages, targeting specific market segments by varying access fees and airtime charges. The ability to understand consumer needs coupled with good marketing strategies is key factors for the telco's success. Apart from the reduction in charges, the other factors pushing mobile service subscriptions to record levels are rising consumer confidence, falling handset prices and mobile phone's increasing popularity as a modern lifestyle accessory. Mobile phones now even appeal to the 16 to 19 years olds (estimated at 1.9 million or 8.6 per cent of the population) and the lower income group. With the growing number of mobile phone service operators, consumers has the advantage of choosing among the various operators that offers the best price and quality. So, the next step we take is to examine the effect of price on consumer choice. For example, the rate on phone calls being charge by the mobile phone service operators.

In the telecommunication industry, players are living in a turbulent age. In order to compete effectively, they are now engaging themselves in an extensive advertising and promotional campaigns. The reason behind it is to make consumers aware of their brand and to make their brand looks superior than the rests which, serves as a differential advantage over competing players. In relation to this study, we will examine the effect of brand image on consumers' choice.

This study will emphasise on consumer choice evaluation process of the current telecommunications services available in the local market; consumers expectations towards the quality of the service, value for money paid for the service rendered to them and the satisfaction that they gain from those services. As the telecommunication industry is developing and changing rapidly, there is a need to determine whether the improvement in telecommunication services specifically the mobile phone system, meet the requirements and the expectations of the customers that they serve and the consumers that they are trying to impress.

1.6 Objective of the Study

1.6.1 General Objective

The general objective of this study is to determine how consumers decide on selecting which mobile phone service operator will they subscribe to. This study also attempts to explain views of consumers on various mobile phone service operators' available in Malaysia.

1.6.2 Specific Objective

Specifically, the objective of the study is as follow:

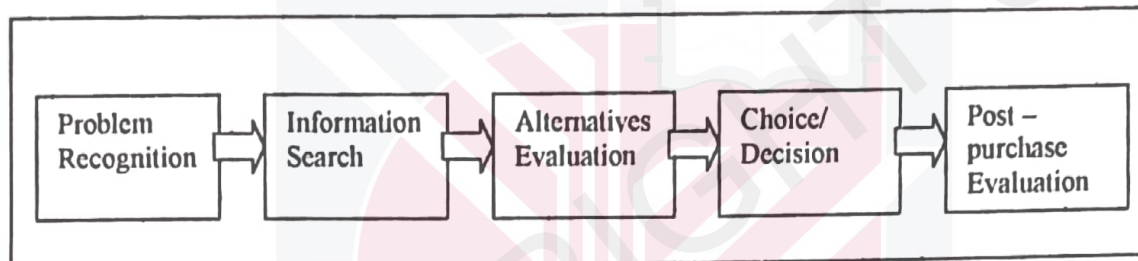
- i.) To identify the key factors that influence consumers choice
- ii.) To examine the consumers perceived quality of the service rendered by the mobile phone service operator.
- iii.)To examine service operator's image on consumers choice
- iv.)To examine service operator's bills charges on consumers choice

1.7 Theoretical Framework

1.7.1 Consumer Decision Process

There are five sequential stages involved in generic consumers decision process, which include problem recognition, information search, alternatives evaluation, choice/decision and post purchase evaluation (Mowen, 1998).

Figure 1.2: Generic consumer decision process flow chart



(Source: Mowen, John et al., (1998), "Consumer Behavior", 5th Edition, Prentice Hall, Inc, p349)

Decision process differs for high-involvement and low-involvement purchases. Extended decision-making process occurs in high-involvement situations; while in low-involvement situation there is less search behaviour and limited decision-making process. The high-involvement decision process flow are sequentially arrange as problem recognition, extensive information search, extended alternatives evaluation, complex choice and post-purchase evaluation (Krugman, 1965).

According to Mowen (1998), factors associated with consumers engaging in extensive decision making and problem solving includes factors associated with perceived risk, consumer characteristic and decision making situation.

1.7.2 Factors Associated with Perceived Risk

Seven types of risk perceived by consumers when making purchase decision are financial risk (risk that the outcome will harm the consumer financially), performance risk (risk that the product will not perform as expected), psychological risk (risk that the product will lower the consumer's self image), time risk (risk that the decision will cost too much time), social risk (risk that the friends /acquaintances will deride the purchase), physical risk (risk that the product will physically harm the buyer), and opportunity loss risk (risk that by taking one action the consumer will miss out on doing something else which the consumer really prefer to do).

The greater the perceived risk associated with a product, the more likely consumers are to engage in extensive problem solving and search. Researchers have found that consumers tend to engage in a more extensive for services than for goods because they generally perceive services as involving higher level of risk than goods (Murray, 1991). Presumably, this is because service is more intangible and less standardised than goods. Also, the greater the choice uncertainty a consumer have about a purchase, the greater the perceived risk will be.

1.7.3 Factors Associated with Consumer Characteristics

Consumer characteristics such as prior knowledge, experience, personality and demographic factors might influence their external search behaviour and decision process. Consumers who tend to be information seekers would engage in a more extensive search than others. Personality characteristics such as open-mindedness and self-confidence have also been associated with greater amounts of external search in decision-making process. Less experience consumers might as well engage in a more extensive information search. There is evidence that consumer who had little or no experience with a product class sometimes felt so ignorant and threatened by the search process that they abandon it quickly. The demographic characteristics associated with increased search in decision-making process are greater education, higher income and higher socio-economic status (Capon & Burke, 1972).

1.7.4 Factors Associated with Environment

The environment may also influence the decision process in term of external information search. Time constraints and antecedent state such as fatigue, boredom, and sickness may affect the ability of consumers to engage in external search. Consumers may engage in extensive information search towards making a decision when they perceived a product to have a high social risk. The way the

consumer defines the purchase task can also influence the search and decision process. The state of the marketplace is another important situational factor that may influence consumer decision process. The greater the number of product alternatives, consumer s may tend to prolong the search process before arriving at purchase decision.

1.7.5 Alternative Evaluation

As consumer compares the options/alternatives available, they form beliefs and attitudes about the decision. From a high-involvement point of view, alternative evaluation follows the standard learning model in which the hierarchy of effects flows from belief formation to affect formation and to behavioural intentions. In such instances the multi-attribute models of attitude describe the evaluation process. Thus, the result of alternative evaluation under high-involvement conditions is likely to be the development of global attitudes toward each of the acquisition alternatives.

1.7.6 Choice Evaluation Process

After evaluating the alternatives, consumers will move to the next step, which is to make a choice. There are two models that explain and predict how consumers make choices. The models are Compensatory Model and Non Compensatory Model (Wright, 1976). The terms compensatory and non-compensatory are

referring to whether high rating attribute can compensate for low ratings on another attribute. In high-involvement conditions, consumer tends to use compensatory model in their choice evaluation process. According to compensatory model, consumers analyse each alternative in broad fashion so that high ratings on one attribute may compensate for a low ratings on other attributes. This type of evaluation process allows information on the attributes to be combined and the alternative with highest overall preference will be chosen.



1.8 Significance of the Study

It is hope that the finding from this research will benefits the companies related to telecommunication industry to better understand their consumer needs and wants. Enhancing their service quality as to meet the consumer expectation level and increases their promotional activities and sharpened their marketing strategies in order to compete with other mobile phone service operator and to gain the loyalty and trust of the consumers towards their service which in return will maximise the profit of the company who actually try to listen to what the consumers hope for from their mobile phone service operator. Hopefully, the results and suggestions from this study could benefit those who are responsible in planning their company's development.

The finding of this study as well can contribute to the growth of the telecommunication industry in Malaysia. Especially in providing proper frameworks for future investors, business corporate or anyone for that matter interested in the telecommunication industry and is interested in knowing its state of art. Last but not least, general consumers tend to benefit from this study especially in becoming a more informed and prudent customer.

1.9 Organisation of the Study

This study will be reported in five chapters and the structure of the report of each chapter will be explained as the following:

The first chapter consist of information on Malaysian Telecommunication industry, the definition of mobile phone provider and mobile phone user, the problem statement, the objective of the study, hypotheses, and the significance of this study.

The second chapter will discuss about the selected literature reviews, which includes related information to the study such as services, service marketing, service quality, and consumer choices.

The third chapter will discuss about the methodology. It will covers the scope of the study, sample selection, data collection and tools that will be used in this study in order to perform the data analysis.

The forth chapter will discuss on the results of the study that has been done and details of analysis. The fifth chapter will deal with the conclusion of the study and the suggestions for mobile phone service operators on how they should tackle the telecommunication market by understanding their consumer needs and wants.

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