# THE IMPACT OF SUBJECTIVE NORMS, PERCEIVED BEHAVIOUR CONTROL AND ATTITUDE ON PURCHASE INTENTION OF THE CUSTOMERS OF TELECOMMUNICATION SECTOR

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Abstract---The foremost purpose of current study is to examine the role of subjective norms, perceived behaviour control and attitude on the purchase intention of the customers of telecommunication companies of Malaysia. Data were collected form the managers of the customer relation and SPSS was used for analysis. The findings exposed that positive links among the subjective norms, perceived behaviour control and attitude with the purchase intention of the customers of telecommunication companies of Malaysia.

Keywords: subjective norms, perceived behaviour control, purchase intention, telecommunication sector

### I. Introduction

This study will explore the elements that influence user's perception on mobile telecommunication services in Malaysia. This section briefly presents an overview of world and Malaysian telecommunication market industry especially on introduction of major telecommunication service provider market share as well as performance. In short, it will discuss about the background of the study, world mobile telecommunication market, mobile telecommunication in Malaysia, telecommunication company in Malaysia, research problem, research questions, research objectives, scope of the study and organization of research (Kim, Kim, & Shin, 2009). In today's world of technology, many functions are equipped in smart phones such as wireless mobile internet, equipped with multimedia functions, camera, personal digital assistance and text messaging as well as voice calls. Mobile telecommunication service industry has evolved as one of the fastest growing fields in past few decades. The mobile phone landscape has change with the convergence in technological alteration and wide array of new users that mobile phone with multiple functions device. Wireless communication becomes fastest growing markets for mobile phone segments (Chen & Tung, 2014; De Silva et al., 2018a; De Silva et al., 2018b; Nikhashemi et al., 2013).

Significantly, communication via wireless communication such as using social media space and social media application are now available at anytime, anywhere. These are parts of our everyday social interaction that are very easily accessible, wirelessly, online space, anytime availability and fast communication. Consistent with the finding past studies which indicates that the mobile phones are still predominant as major communication devices which enable information sharing in social media and coordinating life activities.

In United States of America, the explosion of cell phone adoption phenomenon from 1995 to 2005 has seriously changed the communication landscape. As at 2008, there are sixty six (66) percent youth who owned themselves with mobile phone and there are seventy six (76) per cent who owned media devices. Moreover, they are using such devices for more than seven

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point five (7.5) hour daily. This indicates that the youths are spending more time accessing mobile phone and multimedia devices in surfing social networking sites, social messaging, Tweet, online video, online games and most likely to use many other applications. In China, the mobile internet users have exceeded 318 million and accounting for sixty six (66) percent from 485 million of internet population. "Instant messaging (IM)", online search and online games are a traditional electronic commerce has migrated successfully to mobile platform. Furthermore, those types of technologies are fundamental for supporting mobile transaction which importance for enterprises (Song & Kim, 2006; Dewi et al., 2019; Pambreni et al., 2019; Tarofder et al., 2017).

The evolution of telephone services in Malaysia begun in 1891 and started from Kuala Lumpur (capital city of Malaysia) by British colonial government. The initial stage, there were 21 telephones built in Kuala Lumpur with 400 miles of telephone and telegraph lines. In 1908, the telephone system became more advanced in peninsular Malaysia (known as Malaya) and expanded largely. Later, the government created the Department of Post and Telegraph after realizing the importance of interconnection and telecommunications between postal and telegraphs. This department monitors and provides anything belong to telecommunication services in Malaysia. However on 1967, Sabah and Sarawak were separated from Post and Telegraph Department and started their own department of Post and Telegraph of Sabah and Sarawak. On 1st January 1968, both of these departments merged under Telecommunication Department of Malaysia. Later in 1987, Telecommunication Department of Malaysia transferred to Telekom Malaysia (Telekom Malaysia Reports, 1984) and in 1991 Telekom Malaysia was incorporated as public listed company known as Telekom Malaysia Berhad (Kim & Han, 2010).

Telekom Malaysia introduced the first analogue technology in Asia for mobile telecommunication in 1985. This service started with installation of thousands of radio based stations and five mobile telephone exchange centre to hold coverage for almost nationwide. Syarikat Telekom Malaysia Cellular Sdn Bhd has been formed and the government granted license to provide advanced analogue network in 1988. In 1989, Alpine Resources Sdn Bhd (also known as Celcom Sdn Bhd) took over the operations by acquiring of major stakes from Syarikat Telekom Malaysia Berhad and Celcom successfully increased business within three years of operations (Pookulangara & Koesler, 2011). In 1993, mobile telecommunication market was liberalized and more license were issued to another three new comers; Maxis, Time and Digi. Malaysian wireless telecommunication success has been driven by mobile segment market. In 2013, for the first half of the year, the total of internet mobile package or data package in Malaysia was US\$4.75 billion or RM15.2 Billion, increased for 14.5 percent when comparing to the year of 2012 (IDC Report, 2013). Thus, mobile phone market segment still remain attractive and showing significant growth as the total revenue in second half of 2012 is RM11.32 Billion equal to USD3.56 Billion. The increase of 33.4 percent compared to year of 2012 (Wu & Liu, 2007; Doa et al., 2019; Maghfuriyah et al., 2019; Nguyen et al., 2019).

Table 1: Competitive Analyses of Malaysian Telecommunications Composition of wireless telecom's share for Year 2012 (US\$9.8 Billion).

Item	US\$ million	Percentage %
Mobile voice	4.1	42
Mobile data	3.0	31
Fixed voice	1.1	11
Fixed data	1.6	16
Total	9.8	100

Source: IDC report 2012.

In table 1 above, the comparison for yearly revenue transaction in 2012, the biggest transaction is mobile voice stand with 42% for total of USD4.1 billion, second largest was mobile data transaction by 31% for the amount of USD3 billion, fixed voice data is 11% for USD1.1 billion and fixed data services grew at 16% for transaction of USD1.6 billion. This is sign of acceptance of mobile telecommunication that lead to highest advanced telecommunication services revenue. This is simply because of lower cost access for user in wireless telecommunication compared to wire telecommunications that linked to the problem solving of customer's creditworthiness through prepaid plan, particularly would increase the new segment of market especially in developing country such as Malaysia. Furthermore, the infrastructure of telecommunication has significant network externalities (Smith & Paladino, 2010; Pathiratne et al., 2018; Rachmawati et al., 2019; Seneviratne et al., 2019; Sudari et al., 2019; Tarofder et al., 2019).

Celcom is the second largest mobile telecommunication service provider after Maxis and a subsidiary of Telekom Malaysia with the aim to penetrate wireless based services in telecommunication and it serves up to 33.33% of mobile market share and Telekom Malaysia fixed line market with 88% of total service revenue (www.intelecpoint.com). It is shown that recently Celcom has grown in the strategies in penetrating international market by looking at the threatened traditional fixed line market and at the same time saturated domestic mobile business. It showed that Celcom accounted for second largest of mobile phone sector booming for at least 31 percent of all mobile line phone subscribers behind Maxis by 2006 (Casaló, Flavián, & Guinalíu, 2010). Celcom has received a license for operating 3<sup>rd</sup> generation of mobile communication (3G) called as Wideband Code Division Multiple Asses (W-CDMA) and both started operating to serve 3G services in 2003. This increases the demand for Celcom as it received support positively through government's policy that increased consumer interest in mobile data services and thus created a significant boost to the mobile data subscriber growth over the next five years (Sreen, Purbey, & Sadarangani, 2018).

DiGi was born in Norway and consist of 61 percent of stake owned by Telenor Telecommunication Company and transferred the technology to Malaysia. Telenor brought in its expertise and experiences of the product to local market. DiGi is the only foreign corporation that was given license by the government to operate as Telecommunication Company in Malaysia. Rival to competition made by Maxis and Celcom, DiGi provides some movement by expanding variety communication plans including prepaid cards (Kim & Ko, 2012; Nikhashemi et al., 2017; Tarofder et al., 2019; Ulfah et al., 2019; Tarofder et al., 2016; Udriyah et al., 2019). The company increased its position in competitive environment by creating strong subscribers' based which is driven by innovative products that well is received by customers. It showed that DiGi served and conquered around 27.73 percent of Malaysian mobile market share and it tok an aggressive movement in maintaining its services. The services offered for DiGi is truly limited due to license limitation especially in offering data package. Thus DiGi was focusing on voice services and SMS instead of 3G broadband services. Thus, DiGi was put into high pressure because without 3G license they are stuck between Maxis and Celcom battle in the market that lead DiGi to disadvantage due to rules and regulations, and also political concern set as a barrier to growth. Today, new foreign government policy to reduce foreign ownership in corporation makes DiGi reshuffling their share to be as 49 percent to comply with new policy. Finally after a decade, DiGi moved into an agreement to exchange the 3G spectrum from a local infrastructure provider, between TimedotCom and DiGi (Teng, Wu, & Liu, 2015).

Currently, the high number of mobile phone penetration rate made it easy to predict the customer's perception among millions of users in Malaysia. However, the scenario appears on opposite directions in which Malaysian customers' reaction is not as anticipated. Telecommunication industry has involved in highly competitive environment (Manning, 2009). In the emerging market the customers taste, preference and acceptance are most significant till the market becomes matured. Past studies argue for many companies facing problems in designing of optimal product for emerging market with advance in

mobile telecommunication technology for niche market experience. Although the service provider for wireless telecommunication is not many and this business can be considered as oligopoly market, but the competition is much more competitive among them. Despite pointing to brand stability, however this strategy is not gaining much attention among customers. Past studies findings stated that brand label is accounted for only one per cent of total retail sales. Many corporations are promoting too much and flooded highly in monetary budgeting for just to build the brand. Unfortunately, past studies indicates that Asian customers culturally are considered to have highly uncertainty avoidance characteristics compare to western which low uncertainty avoidance. In Asia, there are 58 percent of people involved in avoidance and imagine such high percentage that perform uncertainty avoidance. As such, in this study to find out what are the customer perceptions towards mobile telecommunication service provider in gaining of market share. The target population will be selected randomly through simple random sampling in Malaysia with centre of attention spot is on Klang Valley region (Aziz & Chok, 2013).

### II. Literature Review

This chapter provides literature reviews of previous study on telecommunication provider phenomenon in Malaysia. A literature review is someone text written on critical knowledge that explained substantive findings with theoretical and methodological contribution on a particular field. That can be defining as secondary sources that did not copy exactly any original work and it's establishing an abstract accomplishment. Thus, this chapter will review the discussion of previous telecommunication service scholar and provides and investigates the relationship of customer individual characteristic towards their intention to make decision which is to leads to certain level of satisfaction among them in order to choose whether to purchase or not to purchase (Yazdanpanah & Forouzani, 2015). This research is underlying the Theory Planned Behaviour and their variables which are attitude, perceived behaviour Control and subjective norm. Plus added another two variables, which can be explained the relationship there are trust and knowledge. Thus concept of framework and hypotheses are developing in this chapter. The following sections describe about the conceptual framework for the whole of the study together formulation hypotheses.

# Theory Planned Behaviour

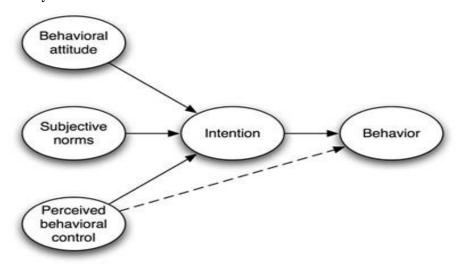


Figure 1: Theory of Planned Behaviour

Past studies argued in the sense that Theory of Reasoned Action (TRA) is only explain for simple behaviour, unfortunately this theory did not explain on other situation such as stress and constrains. Thus it is impossible to explain the relationship

between behaviour and attitude. However, TPB is explain on individual intention to perform such behaviour in which can be explained thru motivational factors lead to impact of behaviour whether need to perform or not to be. Consequently, the stronger the intention on particular individual is the more likely perform such behaviour.

Figure 1 above, the Theory of Planned Behaviour (TPB) was developed by past studies in replacing of Theory of Reasoned Action (TRA) introduced by past studies The Theory of Planned Behaviour (TPB) is a model to predict about human behaviour that well establish across variety of situations. This model explained that to predict behaviour is under individual's control not the circumstances behaviour beyond control. The critical antecedent in TPB is subjective norms that influence individual intention behavioural. Finally is perceived behaviour control refers to individual's perceived ease or difficulty of making intention to purchase. Thus these variables are highest motivation towards making intention (Hsu & Lin, 2015).

Another factor identified by past studies are perceived behaviour control in which plays important role in understanding of consumers' perception in control their temptation or in general, how individual act in control their behaviour or viceversa. This construct is popular among many researchers in explaining of relationship in predicting of customers' behaviour in future and intention. Perceived behaviour control refers to individual's perceptions regarding internal and external force on behaviour including of resources and technology facilitating conditions. It is a form of informational privacy control over dissemination and disclosure of information (Hussain, Mosa, & Omran, 2017).

In customer's individual characteristics such as gender, age, education level and income exist in influence customer's action and thought. These demographic characteristics are important factor that extremely influence customer's behaviour past studies as well as people surrounding such as family members, relative, friends and colleagues at workplace or neighbour at home area. All of these factors have remarkable credibility; they always refer to this type of group opinion before performing purchasing activities. There are several framework of behaviour that consider as important factor of beliefs has been utilized to explain the behavioural intention. Shares beliefs, attitude and behaviours are some of the most important of basic characteristic of a social group (Hussain et al., 2017).

The researcher will investigate whether the three factors namely, attitude, subjective norm, and perceived behaviour has influence ability to makes them intention to purchase telecommunication service. Figure 2 below is a theoretical framework that has been developed. Based on the literature review and observation of the customers subscribe to enrolment of lifelong learning, a model indicating the customer's perception towards lifelong education among adult were developed (Hussain, Mosa, & Omran, 2018).

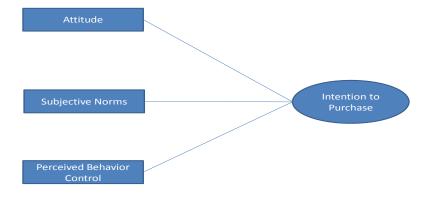


Figure 2: Proposed Theoretical Framework of the Research

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### Attitude

Their study shows that 29.1 percent of the variance in intention to purchase. This research indicates that attitude is an important element in determinant influencing consumer intention in purchasing because the highly positive attitude appeared to have greater intentions in intent to purchase. According to past studies his finding that, attitude described as an important element in predicting and describing human behaviour (Hussain, Musa, & Omran, 2019). Thus, below hypothesis need to be used:

# H 1: There is positive nexus among the Attitude and Intention to Purchase.

Attitude and intention are two widely examined variables in the literature model. Attitude indicates a person general feeling of favourable or unfavourable towards some particular. Behavioural intention refers to a customer's intention to purchase. According to past studies finding that there is significant and positive construct between attitude and intention to purchase. The study shows that TPB model explained 29.1 percent of variance in the intentions to purchase (Hussain, Musa, & Omran, 2018).

### **Subjective Norm**

"One's perception of whether people important to the individual think the behaviour should performed." There are few studies has been conducted on subjective norm will affect buying intentions through attitude. According to past studies, in their study attitude, subjective norm and intention to finish (Hussain et al., 2012). But their mentioned in the study that whether not included still subjective norm do positively influence buying intention and affects the intention to buy through attitudes. According to past studies supported that subjective norm is also significant to influence intention. Their finding mentioned that subjective norm have the most influential to intention in buying behaviour (Nawaz, Afzal, & Shehzadi, 2013). In Malaysia as we have close relationship between both parent, family members, friends and colleague in general influence subjective norm to strong referent point. Thus, this hypothesis is developed:-

# H 2: There is positive nexus among the Subjective Norm and Intention to Purchase.

According to past studies, finding that subjective norm has significant to be most influence driver of intention to purchase.

### **Perceived Behaviour Control**

This is final predictor according to TPB. Past studies has found in their research perceived behaviour control is not a critical factor or predictor on behavioural intention (P > 0.05) of buying intent in Malaysia (Nawaz, Azam, & Bhatti, 2019). In contrast, past studies indicates in simple term the more control of an individual feel about making purchase of telecommunication services the more likely he or she will follow to buy. Therefore, the hypothesis was developed:-

# H 3: There is a positive nexus among the Perceived Behaviour Control and Intention to Purchase.

Intention can be define as a person's location on a subjective probability dimension involving between himself and some action. This chapter explains the framework concept and elaborates the operational definition of variables. Framework concept identifies under independent variable is Attitude, Subjective Norms, Perceived Behaviour Control, Trust and perceived usefulness and dependence variables is Intention to Purchase. The discussions not only focus in variables, but also on explaining of theory. The results of each section will be explained in next chapter.

# III. Research Design and Methodology

This chapter determines the methods that are used in the research on the relationship between independent variables and dependent variable by undertaking the empirical investigation on Klang Valley customer perception in Malaysia and to address the research questions in the thesis. The interdependency concerning of telecommunication services not only

variables such as attitude, subjective norms, perceived behaviour control, trust and knowledge but potentially also measures of perception and intention to purchase (Nawaz & Hassan, 2016).

Indeed, for this chapter describes the process and measures used to attain objectives of this research. It describes the research framework, variables, hypothesis development, research design, population and samples, measurement and statistical method of exclusively among the customer in Klang Valley. Hence, the outcome of the research can be determining the level of Customer perception toward the mobile telecommunication service provider in Malaysia. As such, the classical concept of marketing has been applied on the research in term of consumer behaviour perspective towards the mobile telecommunication service provider in Malaysia.

Independent variables are rooted from the Literature Review in Chapter Two. For this research, independent variables are defined as those factors within and outside the customer environment that affect the choice of mobile telecommunication services. For this study a questionnaire with a total thirty two (32) questions and eight (8) questions from demographic factor were developed to measure the independent variables (Table 2) and, to measure respondents' specific attributes and belief, respectively.

Table 2: Representativeness of Variables

Variables	Operational Definition
Attitude	Degree to which behaviour and attitude will changed the choice of intention
	to purchase
Subjective norms	Degree to which people surrounding belief or against by puts pressure and will affect choosing to purchase of mobile telecommunication services
Perceived behaviour control	Degree to which internal control puts pressure over performing the behaviour

A survey was conducted using a questionnaire with an expected sample size of 200 respondents mainly working adults. The survey was used to answer questions on whether there is an association between consumer attitude, subjective norms, perceived behaviour control, trust and knowledge towards intention to purchase of mobile telecommunication service provider. The first section (Section A) of the questionnaire was on the respondents' demographic and socioeconomic status. Section B to G measured respondents' attitude, subjective norms, perceived behaviour control, trust and knowledge. The survey with a total of thirty two (32) items in five constructs measuring in a 5-point Likert type; value from 5 – Strongly Agree, 4 – Agree, 3 – Neutral, 2 - Disagree and 1 – Strongly Disagree. A dichotomous scales question was also used in the survey.

Before the full scale of this research is carried out, a pre-test questionnaire will be distributed to ensure that there are no mistakes and design errors in the questionnaire. In fact, the pre-test is also to ensure the questionnaire is fully reliable and understandable to the target samples. In fact, there are possibilities to be corrected and improved from the beginning for any errors contained.

After several amendments and improvements are made, the questionnaires will be distributed in order to address the study objectives and plan. Based on past studies, they mentioned that "The design of the questionnaire refers to the directions or instructions, the appearance and format of the questionnaire and, of course, the actual question". Therefore, it is important for the questionnaires to be fully and thoroughly constructed and designed comprehensively

# IV. Findings

Table 4 below, summarizes the descriptive statistics of the respondents according to background profile information such gender, age, race, religion, education, income, current telecommunication and telecommunication plan. In the first category is genders of respondents in this research are male and female. The majority respondent for gender is male consists of 107 respondents (53.3%) and female for 93 respondents (46.5%). The second category, the age of respondent are categorized by four different category, 25 or younger for 86 respondents (43%), 26-35 for 77 respondents (38.5%), 36-45 for 31 respondents (15.5%) and older than 45 for 6 respondents (3%). Third category is race of respondent, where Malay for 166 respondents (83%), followed by Christian for 30 respondents (15%), Indian for 2 respondents (1%) and other for 2 respondents (1%).

In section of religion group is divided by four sub-section, the first part is Muslim for 170 respondents (85%), Second part is Christian is 22 respondents (11%), third part is Buddha for 6 respondents (3%) and Hindu for 2 respondents (1%). For education group is divided by four categories, first part is school certificate for 12 respondents (6%), second part is Diploma for 36 respondents (18%), Degree for 127 respondents (63.5%) and finally Master for 25 respondent (12.5%). For question of income group, income of RM3,000 and below for 43 respondents (21.5%), RM3,001 to RM6,000 for 72 respondents (36%), RM6,001 to RM10,000 for 48 respondents (24%) and above than RM10,000 for 37 respondents (18,5%) Next question for current telecommunication provider consist of four categories. First is Celcom for 87 respondents (43.5%), Second by Maxis for 71 respondents (35.5%), Digi is 28 respondents (14%) and for U Mobile is 14 respondents (7%). Question for telecommunication plan have consist of two categories. The first category is prepaid for 141 respondents (70.5%) and postpaid for 59 respondents (29.5%).

Table 4: Demographic Profile

Variables	Frequency	Percentage (%)
Gender		
Male	107	53.5
Female	93	46.5
Age		
25 or younger	86	43
26-35	77	38.5
36-45	31	15.5
Older than 45	6	3.0

Race		
Malay	166	83
Chinese	30	15
Indian	2	1
Others	2	1
Religion		
Muslim	170	85
Christian	22	11
Buddha	6	3
Hindu	2	1
Education		
School certificate	12	6
Diploma	36	18
Degree	127	63.5
Master	25	12.5
Income		
RM3,000 and below	43	21.5
RM3,001 to RM6,000	72	36
RM6,001 to RM10,000	48	24
Above RM10,000	37	18.5
Current telecommunication		
Celcom	87	43.5
Maxis	71	35.5
Digi	28	14
U-mobile	14	7

Telecommunication Plan		
Prepaid	141	70.5
Postpaid	59	29.5

Table 4 the one way ANOVA shows that significant level at p = 0.586. This indicates that the similarity of score among race are 58.6 percentages which more than 5 percentage. Since the p value is above 0.05, this can be conclude that there is no significant difference in race factor based on their intention to purchase (F = 0.875, P = 0.586). Thus, race of respondents does not have any influence on intention to purchase.

Table 4: ANOVA comparing of race and intention to purchase

			ANOVA			
		Sum of Squares	df	Mean Square	F	Sig.
Race	Between Groups	2.983	14	.213	.875	.586
	Within Groups	45.017	185	.243		
	Total	48.000	199			

Table 5 the one way ANOVA shows that significant level at p = 0.891 and f = 0.570. Since the p value is more than 0.05, this can be conclude that there is no significant difference in education factor based in their system being used (F = 0.891, P = 0.570). The results revealed that there is 57 percentages similarity interest between education groups which more than 5 percentage. Thus, education factor does not have any influence on intention to purchase.

Table 5: ANOVA comparing of education factor and intention to purchase

	ANOVA							
		Sum of Squares	df	Mean Square	F	Sig.		
Education	Between Groups	6.496	14	.464	.891	.570		

Within Groups	96.379	185	.521	
Total	102.875	199		

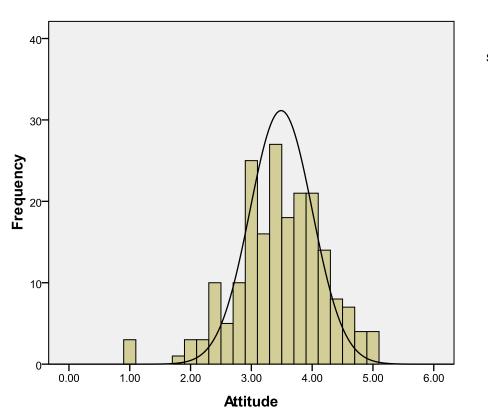
Table 6 reveals that the current telecommunication service provider of respondents does not have influence on intention to purchase. The one way ANOVA table indicates that there is no significant difference in current telecommunication service provider and intention to purchase of the respondent as the result revealed as (F=1.048, p= 0.408). The result indicates that there are 40.8 percentages in similarity score by current telecommunication service provider factor which above than 5 percentages. Since the P value is more than 0.05, thus current telecommunication service provider has no significant difference over intention to purchase.

Table 6: ANOVA comparing of current telecommunication service provider and intention to purchase

	ANOVA									
	Sum of Squares df Mean Square F									
Current_telco	Between Groups	12.215	14	.873	1.048	.408				
	Within Groups	153.980	185	.832						
	Total	166.195	199							

Figure 2 shows mean of Independent Variable of tangible stated at mean of 3.47, indicating high level of tangible among respondents towards the customer satisfaction. This signifies a high level of perception by the respondents on the relevancy of the elements in ensuring attitude towards intention to purchase. The "mean" score is 3.47, which indicates that the average score for this variable is moderate level. Majority of respondents has agreed that attitude is an important factor in developing of intention to purchase.

# **Attitude**

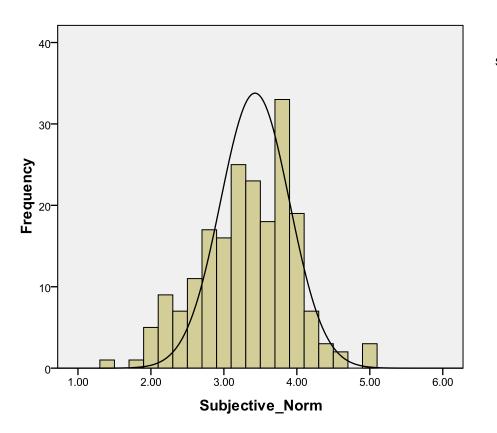


Mean =3.47 Std. Dev. =0.734 N =200

Figure 2: Attitude

It was found that this element was moderate satisfied variable with the mean of 3.33. It was indicated that the respondents were moderate opinion that the reliability were really supportive in enhancing customer's intention to purchase. The "mean" score is 3.33, which indicates that the average respondent score for this variable is agreed. Majority of respondents has been chosen agree that subjective norm is an important factor to stimulate customer's intention to purchase.

# Subjective\_Norm



Mean =3.33 Std. Dev. =0.645 N =200

Figure 3: Subjective Norm

The elements on perceived behaviour control showed a relatively moderate rating. The mean scores recorded for these elements were 3.36. This indicates that the average score for this variable is moderate level. Majority of respondents has been agreed that perceived behaviour control is an important normal factor in customer's intention to purchase towards mobile telecommunication service provider success.

# Perceived\_beh\_ctrl

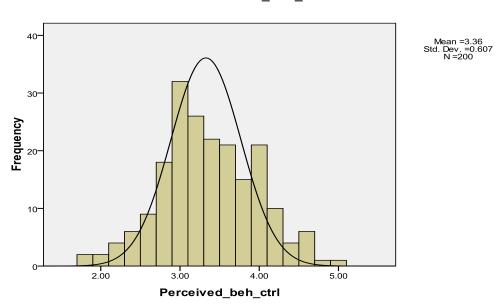
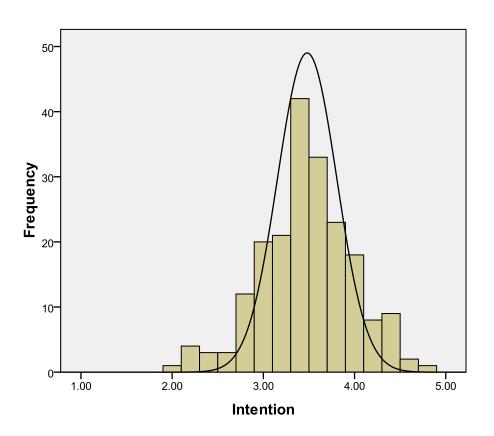


Figure 4: Perceived behaviour control

This element of customer's intention to purchase has moderate rating. The mean score for this element is 3.47. This signifies a relatively moderate level of perception by the respondents on the relevancy of the elements in ensuring of customer's intention to purchase. The "mean" score is 3.47, which indicates that the average score for this variable is moderate level. Majority of respondents has been agreed that customer's intention to purchase in selecting to mobile telecommunication service provider as an important factor.

# Intention



Mean =3.47 Std. Dev. =0.503 N =200

Figure 5: Intention to Purchase

Table 6: Correlation between independent and dependent variable

	Correlations									
	Attitude Subjectiv Perceive Trust Knowledg inten									
			e_Norm	d_beh_ctrl		e	n			
intenti on	Pearson Correlation	.368**	.619**	.373**	.531**	.751**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000				
	N	199	199	199	199	199	199			

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\*\*. Correlation is significant at the 0.01 level (2-tailed).

The first hypothesis is intent to see the relationship between attitude and customer's intention to purchase. Below is the hypothesis statement:-

# H1: There is a positive link among the attitude and intention to purchase

"Table 6 above show the results of Pearson Correlation test that has been conducted between dimensions tangible and customer satisfaction. The results reveal that there is an existence of significant value between these two dimensions as the p value is smaller than significant value (p = 0.000 which < 0.05)". The results revealed that there is 0 percentages in which the respondents did not agree with attitude on customer's intention to purchase. In simple words, many respondents are in agreeing position to attitude that contributed to customer's intention to purchase. However the direction is not strong enough whereby there is another factor can effect to attitude factor in customer's intention to purchase. It simply because of low correlation between these two dimensions as correlation coefficient is at (r=0.368). The correlation is only a low correlation. However the hypothesis **H1 is accepted**.

The second hypothesis is intending to evaluate the relationship with subjective norm and customer's intention to purchase. The hypothesis as below:-

### H2: There is a significant relationship between subjective norms and intention to purchase

Table 6 above shows the results of Pearson Correlation test that has been conducted between dimensions of subjective norm and customer's intention to purchase. The results revealed that there is positive relationship between two dimensions as the p value is smaller than significant value, (p=0.000 which is <0.05) and **H2 is accepted**. The results revealed that there is 0 percentages in which the respondents did not agree with subjective norm on customer's intention to purchase. Many respondents are in agreed to subjective norm as contribute to customer's intention to purchase. However the direction is high moderate whereby this factor can be affected of people's subjective norm in intention. There is moderate high correlation coefficient is at (r=0.619).

The third hypothesis in this study is assessing the relationship between perceived behaviour control and customer's intention to purchase. Below is the hypothesis statement:-

# H3: There is a significant relationship between perceived behaviour control and intention to purchase

Table 6 shows the results of Pearson Correlation test that has been conducted between perceived behaviour control and customer's intention to purchase. The results reveal that there is positive correlation between these two dimensions as the results of the p value is smaller than significant value, (p = 0.000 which is < 0.05) and **H3 is accepted**. The results revealed that there is 0 percentages in which the respondents did not agree with perceived behaviour control on customer's intention to purchase. As such, many respondents are in agreed to perceived behaviour control contributed to customer's intention to purchase. However the direction is not strong enough whereby there is another factor can affect to perceived behaviour control in customer's intention to purchase. There is low correlation between these two dimension as correlation coefficient is at (r=0.373).

### Regression analysis of Coefficient

"Regression analysis of coefficient test shown in table 7 is used to test the coefficient between independent variable and dependent variable". The five independent variables and one mediating variable explain 81.9 percent of the variance in intention to purchase. The results from the table shows that Beta of attitude is -0.060, subjective norm is 0.373, perceived

behaviour control is 0.040, trust is -0.008 and knowledge is 0.602. It means that every 1 percent increase of independent variable will be affected by Beta for each variable. Based on the result, knowledge has the highest impact on intention to purchase.

Table 7: Regression result on intention to purchase

	Coefficients							
Model	I	Unstandardiz	Unstandardized Coefficients		t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	.145	.195		.747	.456		
	Attitude	058	.050	060	-1.147	.253		
	Subjective_Norm	.407	.061	.373	6.704	.000		
	Perceived_beh_ctrl	.046	.061	.040	.749	.455		
	Trust	008	.058	008	137	.891		
	Knowledge	.570	.054	.602	10.597	.000		
a. Dep	endent Variable: intention	1						

In addition, subjective norm is score p value less that 0.05 (p=0.00) and knowledge for p=0.000 which is less than p = 0.05 are significant predictors of intention to purchase. Others, such as attitude (0.253), perceived behaviour control (0.455) and trust (0.891) are not predictors of intention to purchase.

### V. Conclusion and Recommendation

This chapter will be discussed on the conclusion and recommendation that based on the analysis investigation finding obtained from the questionnaires given to respondents. Generally, the primary of objective of this study is to identify the main factors that influence the consumer's perception towards intention to purchase of mobile telecommunication services with new variables derived from the literature. Significantly, the thesis project results outcome can be determine the significance impact based the fact finding or analysing in chapter 4. Thus, the research finding will indicate the level of perception based on the Theory of Planned Behaviour questions.

"Using these implications in the construction of a theoretical and analytical framework, the researcher attempted to investigate consumer's perception" towards intention to purchase and examine whether these attitudes vary in relation to the consumers personal characteristics such as the gender, age, race, religion, level of education, income of the respondent, current telecommunication and telecommunication plan. By further observing the literature review, theoretical framework, research design methodology, and analysing the fact finding based on database given from the questionnaires, the conclusion can be obtained with other significance main contribution of this project paper will be identified. Subsequently, the theoretical and managerial implications, limitations and suggestions are discussed deliberately in the further research and study

# VI. Summary of findings

Based on demographic analysis, the respondent who answered the questionnaire were mainly male respondent by 107 out of 200 respondents or 53.5% from the whole of respondent. However, female respondents represent for 93 respondents or 46.5%. Thus indicates that the both gender are almost equally frequent usage of telecommunication. In fact both of them are most active users in general. Therefore in this study can be assembled to both gender behaviour particularly the research would based on both gender even there are many difference among them especially in personality development, intelligence past studies, cognitive ability.

Significantly, based on the age factors, 25 or younger for 86 respondents (43%), 26-35 for 77 respondents (38.5%), 36-45 for 31 respondents (15.5%) and older than 45 for 6 respondents (3%). In this factor, indicates that the most active users of mobile telecommunication service those who are age below than 25 years of age and 26 to 31 years of age. From the analysis can be concluded than the majority of mobile telecommunication users are generation Y in which this generation most adapt to the new type of technology. This result consistent with Hedrick Wong (2008) identifies that the generation Y is the most important market as their largest spending power and this group as emerged affluent part of society especially in develop countries.

The race of respondents in this study shows the majority is Malays for 166 respondents (83%), while another 30 respondent are Chinese (15%), Indian score for 2 respondents (1%) and others is only 2 respondents (1%). Based on the data of respondents, Malay are most active and frequent users of telecommunication, although the other race such as Chinese and Indian are second and third largest users in Malaysia. In religion section is divided by four sub-section, the first part is Muslim for 170 respondents (85%), Second part is Christian is 22 respondents (11%), third part is Buddha for 6 respondents (3%) and Hindu for 2 respondents (1%). The increasing demand of mobile telecommunication has been increased the interest in understanding the usage of telecommunication and data pattern in Malaysia. Fast changing and declining in mobile telecommunication in a decade as depicted in chapter one, have been positioned the mobile telecommunication company at high technology risk. Hence, the company should identify the key element issues that can be improved over the time, in order to increasing market share and win back the businesses from their competitor. In fact looking at the mobile telecommunication current business performance, the company needs to take this opportunity to understand the possible causes of their business declining.

The purpose of this thesis was to gain an understanding and to identify the perception of peoples towards mobile telecommunication services as it became an important part of Malaysians telecommunication services requirements. Our concern is about the level of awareness, perception and acceptance of consumption of mobile telecommunication services in Malaysia. This section is to explain on the research problem, objectives, questions and hypotheses that were presented earlier

in Chapter 1 and Chapter 3 together are discussed and linked to the literature review in Chapter 2. The statistical analyses in Chapter 4 presented the results and answered each research hypotheses.

## VI.1 Conclusion to Research objectives

To study the perceptions of Malaysian mobile telecommunication user towards telecommunications service providers in Malaysia. As discussed in previous section, the aim of this research is to study the perception of Malaysian mobile telecommunication users.

Correlations Attitud Subjective Perceive Trust Knowledg intentio Norm e d\_beh\_ctrl e n Pearson Correlation .619\* .373\*\* .531\*\* .751\* 1 intenti .368 on Sig. (2-tailed) .000 .000 .000 .000 .000 N 199 199 199 199 199 199 \*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 8: Correlation between variables

From the above table, there are five independent variables namely; Attitude, Subjective Norms, Perceived Behaviour Control, Trust and Knowledge. All the variables show of positive significance level of 0.00 which below than 0.05 and this signify of level of significant are high. The first hypothesis being tested is Attitude. An Attitude of Pearson Correlation indicates of 0.368 in which states that the perception factor of attitude attribute is stand at 36.8% that can be considered as low correlation but yet still considered an exist of level of perception among the respondents towards mobile telecommunication.

In attitude it is proposed that belief behavioural is a prime determinant. Past studies identifies that perceived quality is main attributes in determinant on satisfaction and evaluation. The important thing is that perceived quality is assessed by brand, image, appearance, quality and variety of services. Many studies suggested that services and brand image are unique contribution to performing attitudes. Hypothesis one was significantly positive relationship between both variables. Past studies mentioned that many of studies have been confirmed that attitude is a strongest predictor of intention in social as well as telecommunication context. These consistent with previous studies in the domain of social science and especially in consumer behaviour, this was support by current studies that attitude was highly significant to behaviour. Past studies defines the attitude as evaluative nature which refers to overt or covert evaluative responding to cognitive, affective, or behavioural

responses. This is most popular clarification which distinguish between cognitive, affect and behavioural past studies but very useful to separate between nonverbal responses between the categories. Cognitive responses are verbal nature on expression of beliefs that link together with certain characteristic or attributes objects. Cognitive will response towards nonverbal nature which are most difficult to assess and the information providing about attitudes is usually indirect. Attitude associate with the time required to obtain and to purchase. However, current lifestyle and practices have caused an increase people time constraints. Affective responses are inferred feelings that attribute to attitude object. For instant if a person admire somebody or feel love or interest would seem to hold favourable attitude. Behavioural responses are inclination, commitment, intention and action with respect to attitude object which those who are having positive attitude that lead to perform such particular behaviour.

Second hypothesis being tested is subjective norm. The result revealed that there is positive correlation between these two dimensions as the p value is smaller than significant value, (p < 0.05). Moreover, there is a moderate high correlation coefficient is H2 at (r=0.619) and p value of 0.00. This indicates that the level of perception in subjective norms is 61.9% and considered as high level of perception. This result was consistent with Chang et al (2009), "stated in their study that information sources influence customers' satisfaction and will directly affect on subjective norms and belief of respondents'. This also will makes people influence others who are close to them to perform and make decision behavioural in purchasing of mobile telecommunication services. Furthermore, it was consistent with past studies stated that subjective norm can influence user's behavioural intention in academic digital libraries. They also believe that user of digital library may seek academic resources in an academic library because other think the same social network use it. This also applies to intention to purchase as other peoples might influence other to practice of its social values.

Many of mobile telecommunication service providers have put increasing emphasis on information sources. The information sources must be transfer to technology. As Information sources makes information available anywhere and just click in the internet. Information sources in marketing concept fact that retention is five times more important rather than attracting new customers companies are creating marketing principles and simple develop long term relationships with the most profitable customers. Significantly, this implies to the subjective norms which customers feel comfortable with the mobile telecommunication services via information.

The third hypothesis being tested is perceived behaviour control. The finding indicate that there is significant differences in perceived behaviour control towards intentional behaviour which is value at (p=0.000 which is <0.05). As probability error is less than 0.05 mean that this variable does influence the perceived behaviour control and intentional behaviour. The correlation score is 0.373 and this indicates that the level of perception of respondents is 37.3% which is considered as low correlation. If self-desire to have intention they will influence expectation that they would buy it and should perform behaviour, then the individual should be likely to do or not to do so.

According to past studies, Perceived behaviour control is to predict as the perceived easy or difficulty or performing behaviour. Indeed, technology enhancement by introducing latest type of products has become popular and commercially successful with all level of customers. The results was supported by past studies, that perceived behaviour control influence intention to purchase as in their study indicates that there is significant relationship between perceived behaviour control and intentional behaviour. In this case, if perceived behaviour control is seen as self-desirable behaviour that individual is more likely have an intention to believe and buy it. Consistent to the studies of past studies, the research found that perceived behaviour control was significantly related to believe.

This result also consistent with past studies who argued that if customers perceived high level of self confidence in evaluating certain product purchasing decision when the perceived behaviour control would be a major issues in making decision and influencing the intentional behaviour. knowledge and suitability are significant contributor of perceived

behaviour control. People rely on information sources as prime information while others are left un-exploited. information seeking behaviour find that as important determinant for successful in making intentional behaviour.

The second most influential factor towards intention to purchase is subjective norm with highest beta for  $\beta$ =0.373 and p < 0.000. That indicates intention to purchase depends on attitude by customer through the services availability and quality issued by mobile telecommunication service provider. Study showed that mobile telecommunication customer do agree that attitude factor effect customer satisfaction and intention to further perform purchasing past studies of mobile telecommunication services. This results shows that there is existence in the element that influence intention to purchase but it may not be strong enough to force the subjective norms towards intention to purchase. This is because many customers are satisfied with products or services being offered, they feel more comfortable that create changes of people intention to purchase, loyalty and the power of word of mouth marketing. The customer satisfaction will lead to repeat purchases, loyal, customer retention and recommend to other to perform in intention. The company services towards the customer can be measured by the amount of online information material with well-organized and readable. However, another factor such as interaction with other customer has a significant effect on attitude past studies in mobile telecommunication.

The third most influential factor in intention to purchase is attitude score of  $\beta$ =0.060, p=0.253. This antecedent carrying the positive value and the p value is more than 0.05. Basically, this is the sign of existence in attitude on customer in performing of positive attitude in subscribing on intention to purchase. Past studies found significant impact on attitude towards intention. The forth most influential factor in intention to purchase is perceived behaviour control scored for beta of  $\beta$ =-0.040 and p=0.455. This is consistent with most of the literature suggested on negative relationship between both perceived behaviour control and intention to purchase.

Trust are the lowest scored for beta of  $\beta$ =0.008 and p=0.891. This result revealed that there is relationship between trust and intention to purchase. Trust is the most effective tools in influencing of people's intention in making intention to purchase. Several studies showed that trust have stronger influence of intention to purchase.

# VII. Recommendation

This study will benefit corporate businesses, manufacturer, marketer and government in Malaysia with deeper investigation from insight view of customer perception and intention that will leads to building of customer confident in making intention to purchase. The different marketing approach is needed in persuade approaching technique in stimulate of business strategies. Thus the finding of this study will be suggested that in positive attitude towards mobile telecommunication would significant contribution for many business owners to consider in increasing of customer's purchase intention. The future market developments for mobile telecommunication in Malaysia need to be studies intensively due to it potentiality growth and success in the future. Implies to abovementioned situation, the producer need to formulate strategies in order to compete with many competitors in the market especially in develop and commercialize new services as well as market opportunity identify in allocation maximize resources among the marketing activities.

Another suggestion to mobile telecommunication provider is to study about potential future market development to expend and success in Malaysia. Implies in this view the higher management of mobile telecommunication service provider need to develop strategies to compete with their competitors especially in identify market opportunities, develop and commercialize new services, allocate resources among marketing activities and design an appropriate organizational structure to ensure the performance desired is achieved. In thinking strategically many factors can be considered by implementing of marketing mix (4P's) as follows:

Successful products or services are built on a foundation meaningful product or services differentiation. Using product differentiation strategy to put distance between mobile telecommunication service provider to competitor's product or services so customer having their decision based on that differentiation. There are two type in product differentiation; 1) vertical differentiation and 2) horizontal differentiation. Under vertical differentiation is to improve feature on mobile telecommunication services so that the customers perceived a difference in quality due to some improvement. Horizontal differentiation is focusing on customer's preferences on what they want and needs. Focusing in their preferences will show to customer that the product or services has function more specific and customized.

Many of product or service producer have wrongly put strategies on location that lead them to failure. Place concern about various transportation, basic amenities and facilities, and store them, and then getting the right product to the place at the right time involves the distribution strategies. Choosing the destination of product must use several distribution strategies whether using internet as device or push it to the distribution strategy to enter market especially in rural area that may be hard to penetrate. The company may choose strategies that may suit depending to the location that they may reach.

### VIII. Future Research and Limitations

In this research, only five elements of independents variable were investigated for that matter, the researcher feels that there are still other elements that can be added in to the variable to improve future researcher. The sample size and physical coverage to some extend has influence the quality of the research findings and it's generalize ability.

There are several limitations of the design of this study. One limitation is related to the selection bias. This was due to the fact that the participation in the study was based on voluntary basis, usually those who volunteered are satisfied and do not have any complains towards the alternative health products. Consequently, it increases the results of intention to purchase behaviour towards the mobile telecommunication services. On the other hand, a sample of 200 respondents is not big enough to detect any significant association between the socio-demographic characteristics and the level of intention to purchase behaviour.

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