THE IMPACT OF KNOWLEDGE AND TRUST OF CUSTOMERS ON PURCHASE INTENTION OF TELECOMMUNICATION SECTOR IN MALAYSIA

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Abstract---The aim of existing study is to inspect the effects of knowledge and trust on the purchase intention of the customers of telecommunication companies of Malaysia. Data were gathered form the head of the customer relation and SPSS was used for analysis. The results uncovered that positive nexus among the knowledge and trust with the purchase intention of the customers of telecommunication companies of Malaysia.

Keywords: knowledge, telecommunication sector, purchase intention, trust

I. Introduction

The demand for telecommunication services has been exploded and strong since few decades. The first generation (1G) for mobile network started early in 1980's, in which offering to market with voice call plan or analogue transmission. However, one decade after the 1G network replaced by digital transmission for better and clearer voice transmission. Eventually, the digital transmission replaced by newer version known as second generation network (2G) technologies or GSM with simple and fair network. Another step of technologies introduced to the market is a 2.5 generation network (2.5G) in which transferring program of data transmission together with voice. The third generation network exists to absorb the need of high speed data and voice transmission. Later, telecommunication value gradually increase from high speed downlink packet access, mobile data services and today fourth generation network or 4G and yet become more and more technologies increase every few year (Mohseni, Jayashree, Rezaei, Kasim, & Okumus, 2018; De Silva et al., 2018a; De Silva et al., 2018b; Nikhashemi et al., 2013).

Since newly introduction of mobile telecommunication, the capacity of the service is able to meet the massive demand. Significantly, the challenge of telecommunication network is not only on network side, but also involved in innovation new service development. Future mobile telecommunication generations' technologies will be expected increase in enhancing of versatility and transmission speed services (Aziz & Chok, 2013). This situation forced network operator to increase and re-organized multi sources information flows to meet the needs and wants of customers by providing advancement in network infrastructure, increase network effect to the system and expand the voice telephone contents.

Past studies reported that fixed line usages are still in consistent demand growths and expected in the year of 2014 would be undertaken by mobile data and mobile internet. Many people are using mobile devices such as smartphone and tablets computer equipped with high speed internet access that make people life easier as well as offer new data collection opportunities. Today, mobile phone becomes vital and necessary as a central part of people's daily life. International Telecommunication Union Reports (2011) suggested that smart phone mobile data is the most famous and recorded almost six billion of mobile phone data packet subscriptions worldwide. Past studies states the worldwide mobile connections are

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expected to grow up to $ 7.4 billion by 2015 at 48 percent increase from $5 billion connections worth in 2010 and foresee overtake of PCs popularity as common device in surfing of internet and website. The wireless adoption, specifically in data services, is expected to growth in foreseeable future; expected growth at compound annual growth rate (CAGR) by 7.2 percent from 2011 to 2016 in total transaction of $420 billion and both data and voice call revenue are expected grow at CAGR of 1.9 percent only amounted to $1,047 billion (Khatibi, Ismail, & Thyagarajan, 2002; Dewi et al., 2019; Pambreni et al., 2019; Tarofder et al., 2017).

In South Korea, The Korean Communications Commissions (2011) reported that there are 470,000 smartphone subscribers in November 2009 and in October 2011, the significant growth of over than 20 million subscribers in just after releasing of IPhone in Korean market and this showed a dramatic increase in usage of smart phone in Korea. Increase usage of smart phone also significantly affects social networking services (SNS) such as Twitter, Facebook and Instagram. Past studies founded that the Korean's Twitter visitors has increased from 606,887 in November 2009 to 4,342,569 by July 2010 and this showed an increase of more than 700%.

In India, according to Department of Telecommunications (Annual Report 2006-2007) in 2007, there are 250 million subscribers of growing market. Particularly, with status consideration in rich society of urban area of fast changing role as convenient networking tools and penetrating to all members of society including urban poor society, middle class society and upper class society. It becomes extremely important for many organizations to understand customer's changing environment, needs, wants, behaviour and attitude towards mobile telecommunication service providers for efficiently compete among each other in gaining their market shares. Telecommunication service provider plays an important role in fulfilling of customer's needs and wants (Aziz & Chok, 2013; Doa et al., 2019; Maghfuriyah et al., 2019; Nguyen et al., 2019).

There are three states which achieved higher achievement in mobile phone penetration which is Kuala Lumpur stand for 151.8 per cent from the state's population, second by Negeri Sembilan for 115.7 per cent and third was 105.9 per cent for Johor. The lowest penetration is Sabah scored for only 58.5 per cent. By year of 2009, the usage for mobile phone is not significant due to low awareness in usage of mobile phones less enjoyable services and price for phone and line are tentatively high (Casaló, Flavián, & Guinalíu, 2010). Later on 2012, mobile phone subscribers increased. For instance, Kuala Lumpur achieved 203.5 per cent form state population, Selangor stand with 115.4 percent and Negeri Sembilan with 144.7 per cent. This growth is a high achievement as hand phones became most popular items through which mobile phone were linked to mobile data package that enable social media communication such as Facebook and Twitter, accessing internet, instant messenger and accessing emails. Thus, it represent user's willingness to adopt in advanced contents wireless technologies and acceptance of existence of 3G and 4G compare to other wireless services (Chen & Tung, 2014; Pathiratne et al., 2018; Rachmawati et al., 2019; Seneviratne et al., 2019; Sudari et al., 2019; Tarofder et al., 2019).

There are direct relationship between penetration rate of Smartphone and mobile data. When Smartphone users increase, it directly increases the demand of mobile data (Hsu & Lin, 2015; Nikhashemi et al., 2017; Tarofder et al., 2019; Ulfah et al., 2019; Tarofder et al., 2016; Udriyah et al., 2019). Therefore, competition between mobile providers is going stronger as the reduction in the price of Smartphone, price of data package, reduction on monthly commitment fees for post-paid customers, free airtime loaded for prepaid customers, cheaper call rate packages and SMS tariff. The competition has benefited the customers in terms of quality of services as well. Mobile providers have been actively increased it network coverage and quality of its network plus introduction of initiatives to better manage relationships with customers. The studies explain that the telecommunication market is aggressive. There are high percentages of churn rate knowledgeable by the operator and it indicates that subscribers are prepared to change operator when there are better offer. To maintain as market

leader, service quality as well as service rate will be major factor for telecommunication operators to keep hold of customer loyalty (Hussain, Mosa, & Omran, 2017).

Over the past ten years, telecommunication market in Malaysia evolved to a more open and competitive market compared previously which was more to centralized telecommunication monopoly (Hussain, Mosa, & Omran, 2018). There are more telecommunication companies been issued with 3G / 4G license as well as new MVNO (Mobile Virtual Network Operator) company coming to the market (Hussain, Musa, & Omran, 2019). Thus, there are many changes on how the business should be operated in terms of functional and fundamental to serve or attract the subscribers better. Therefore, there are more and more focus given to improve customer value, customer loyalty and customer acceptance of the services in building better competitive advantage for successful customer retention and acquisition with the increasingly competitive environment in Malaysia telecommunication industry. Despite tremendous growth in Malaysian mobile telecommunication service, the competitive remains among few biggest mobile telecommunication service providers namely, Celcom, Maxis and Digi that have penetrated for the whole of Malaysian market. Thus, the following information about these three companies is important in further understand local telecommunication competition status.

Table 1: Mobile Subscriber Market Share in 2012

Telecommunication provider	Revenue in Million (RM)	Percentage (%)
Maxis	2,216.0	38.90
Celcom	1,901.3	33.37
Digi	1,579.7	27.73
Total	5,697	100.00

In 1993, Maxis Communication was established by the industrial conglomerate Usaha Tegas. Maxis Bhd is a non-bumiputra local owned mobile telecommunication services in Malaysia. After a year of operation, government of Malaysia granted Maxis Communication a 20 years license to develop advanced telecommunication network such as satellite telephone, internet, transmission services and cable wire domestic line (Hussain, Musa, & Omran, 2018). The company was formed in 1995 as a private limited owned and in 2002 it become listed in Kuala Lumpur stock exchange (KLSE) but in 2007 it return back to become as private limited owned. Same strategy as Celcom, the company has expanded its business to India and Indonesia. Currently, Maxis showed increase and strong mobile data growth driven from the year of 2010 and largely contributed by pre-paid and post-paid plan (Hussain et al., 2012). This seems to be an initial step for Maxis to further enhance its mobile internet data package as well as broadband business which this can be helpful in driving data revenue for 3G segment plan (Kim & Ko, 2012). Another action done by Maxis is expertise in improving data package target segment by enhance the faster access content such as gamming, downloading, viewing movies and transferring data as leading to stronger take up rates in 3G services (Kim, Kim, & Shin, 2009).

Since 2000, Maxis has emerged with significant rapid expansion. In 2012, the volume of subscribers of mobile telecommunication leader holds up to 38.90 percent of share market among the biggest three telecommunication provider in Malaysia (Kim & Han, 2010). Maxis also are part of telecommunication operators awarded the third generation (3G) W-CDMA license. The service offered by Maxis are pre-paid call plans, post-paid monthly subscription , MMS, WAP, global

roaming, broadband internet plans, 3G and residential fixed line services. Another service offered by Maxis is "Satellite based communication" called as VSAT and BlackBerry wireless internet connection plan as special plan (Manning, 2009). Besides various services offered by Maxis, the most popular and highly demanded is pre-paid service which recorded more than 6.3 million customers in Malaysia (Nawaz, Afzal, & Shehzadi, 2013).

The changes in customers uncertainty avoidance has made brand label strategy declined. The relationship marketing approaches are taking place into new phenomenon. Past studies identifies that relationship marketing is important approaches in seeking customer loyalty. This element apparent that majority of researcher focused in general mechanic in influence the image and awareness of brands past studies and streamline on value added in services that leading to the creation customers' positive experiences (Nawaz, Azam, & Bhatti, 2019). The main issue is not about the label of brand in particular telecommunication service provider but more in customer's preferences and taste. Unfortunately, many telecommunication service provider have under estimate or unaware of the concept of customer's perception and acceptance that lead to intention to purchase (Nawaz & Hassan, 2016).

The findings and outcomes from this research would be able to provide hypermarkets an in-depth understanding on what are the factors that affect the Malaysian consumers' behaviour in selecting the house brand products. The hypermarkets can utilize the knowledge to re-strategies their marketing plan of their house brand products in maximizing the profitability of the business.

II. Literature Review

Mobile telecommunication services are expected to growth and popular due to its mobility characteristics. Past studies in the study identify that customer's attitude is a most importance factor in successful of telecommunication service marketing research. Many of researcher revealed that customers who have internal positive attitude will also perform the same attitude and very much easier to be persuade and influenced. Alternately, if customer having negative attitude they will do the same thing. Abovementioned statements are consistent with past studies in which attitude influence on prediction of intention. Perception about the characteristics of mobile telecommunication service is not invariant across individuals. Furthermore, individuals perceived a new type of skill, knowledge and education from the point of their own self internal cognitive processes and develop beliefs about them. Past studies, proposed a conceptualization of concentric sources of individual characteristic which lays a more distal set of influences factors (Pookulangara & Koesler, 2011).

Furthermore, Social Cognitive Theory developed by past studies explained in the action and thought of person could happen vicariously due to its outcome and observing of other people behaviour. Individual ability in absorbing of other peoples are various with any individual in shaping their behavioural patterns and in same time avoiding unnecessary error and trial (Smith & Paladino, 2010). Due to that term, many researchers identify the similarity with subjective norms, social influence, social norms modelling or reference group. Subjective norms or normative belief refers to consumers' belief regarding normative expectations from other group or individual that surrounding them. Subjective norms becomes an importance construct in guidance of customer's behavioural intention or intention to perform of such behavioural based on the function that other could influence them to perform.

This theory consist of three components that explain further intention to behave and thus behave itself, for instant attitude, subjective norm and perceived behaviour control. The behaviour is determined by ability of individual's in making intention and this attention is determined by attitude, subjective norm and perceived behaviour control. All of these elements are function of belief. Extended to that theory, this research will add on another variable which are trust and perceived usefulness

in extension to the theory. Thus, this study will explain the factors that influence intention to purchase among consumers. The researcher will investigate whether the two factors namely, trust, and knowledge has influence ability to makes them intention to purchase telecommunication service (Song & Kim, 2006). Figure 1 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.
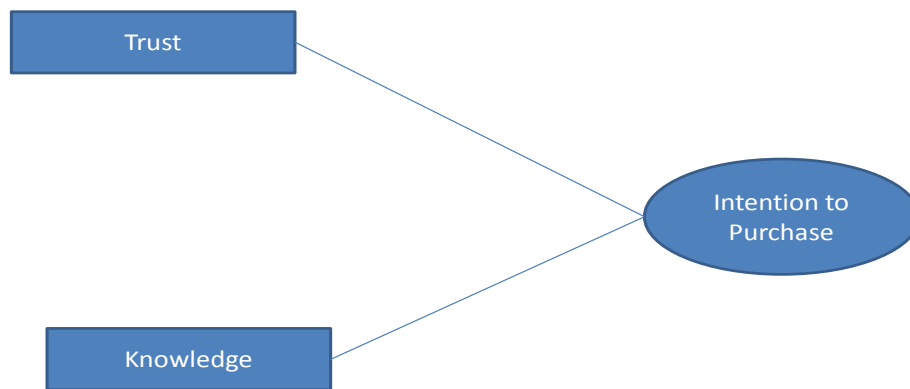
Figure 1: Proposed Theoretical Framework of the Research

Trust

Research made by past studies suggested that trust has a significantly positive influence on purchase intentions. The study is based on "the influence of corporate image, relationship marketing and trust on purchase intention: the moderating effects of word of mouth". The study revealed that trust interpreted of 25.2 per cent of variance towards purchase intention (Sreen, Purbey, & Sadarangani, 2018). Based to the above literature the below hypothesis are developed:-

H 1: There is positive and significant nexus among the Trust and Intention to Purchase.

Past studies, finding that trust has significant positive relationship over intention to purchase. A total of 473 respondents were involved in their online survey and 458 are data consider good and able to use. The results revealed that trust could interpret 25.2 percent of variance towards intention to purchase. Thus this variable can be used to explain the relationship between both (Teng, Wu, & Liu, 2015).

Knowledge

Knowledge in this study refers to consumer knowledge towards telecommunication services. Particularly, knowledge will be tested whether it is one of the predictor that will influence intention to purchase of telecommunication services among customers. As stated by, past studies has pointed out that knowledge is one of the key ingredients that influence peoples decision in making purchasing. The knowledge that related to the study is on whether the customers: 1) Know every telecommunication provider services availability (Wu & Liu, 2007). 2) Know in evaluate an alternative in telecommunication service. Thus knowledge is includes as hypothesis as below:-

H2: There is a positive and significant nexus among the Knowledge and Intention to Purchase.

Intention to Purchase

Intention can be define as a person's location on a subjective probability dimension involving between himself and some action. According to past studies, intention is recognize as the motivation for individual engage in certain behaviour (Yazdanpanah & Forouzani, 2015). According to past studies behavioural is defined as the individual's subjective probability that he or she will engage in that behaviour. Past studies, intention to purchase refers to the attempt to buy or visiting store who offering product. According to their literature, there are several essential meanings:-

1) Possibility for consumers to be willingness to consider purchasing
2) Person want to buy in the future
3) Decision of a consumer to buy product again

III.   Research Design and Methodology

Once these relationships were identified the hypotheses can be postulated easily and the dynamics of the situation was clearly understood. The research model suggests that customer perception of mobile telecommunication service provider based on five factors: attitudes, subjective norms, perceived behaviour control, trust and knowledge. Based on the propositions derived from the literature review in Chapter 2, a conceptual framework is developed for explaining the perception of peoples in accepting of mobile telecommunication service provider services.

Table 2: Representativeness of Variables

Variables	Operational Definition
Trust	Degree to which belief factor will influence on choosing of mobile telecommunication services
Knowledge	Degree to which knowledge as factors on choosing of mobile telecommunication services

The hypotheses developed in this study will address the two research objectives mentioned in Chapter One. Two hypotheses were developed based on the factor structure derived from the literature review and explanatory factor analysis. Hypotheses were established to satisfy the two research objectives. These factors were compared to the respondents' demographics. The sampling frame is a physical of all elements in the population from which the sample is drawn and it represent within a population. The target population or sampling frame of this research was adults' individuals above eighteen years old who are working in various sectors of public and private sectors in Klang Valley.

The questionnaire consists of seven sections. Section A consists of the items that captured general information about the respondents such as gender, age, race, religion, education level, monthly income, current telecommunication provider and current telecommunication plan. This part of the questionnaire is designed by using nominal and ordinal scale. Gender was divided into two portions which is male and female. Age of the respondents was separated into four sections: 25 or below, 26-30, 31-45 and older than 40. The respondent race is divided by four sections: Malay, Chinese, Indian and Others. Religion of the respondents is separated to five sections: Moslem, Christian, Buddhist, Hindu and others. The rank of education was separated into four categories: School certificate, Pre diploma, Bachelor Degree and Masters Degree/PhD. The total

household income of the respondent was asked to determine the economic condition and divided by six categories- less than 1000, 1001 to 2000, 2001 to 3000, 3001 to 4000, 4001 to 5000 and more than 5000. It was consider to be important because not all respondent work, which can make a significant difference in respondent economic condition. Current telecommunication service provider that respondent currently subscribe is divided by five sections: Celcom, Maxis, Digi, U-mobile and others. Finally is mobile telecommunication plan consist of two category; prepaid and post-paid. Part B to Part G consisted attitude, subjective norms, perceived behaviour control, trust and knowledge. From these sections, the researcher would analyse and predict the customer intention to purchase of mobile telecommunication service provider.

To assess the reliability and validity of the questionnaire, a final draft pilot was prepared and pre-tests were conducted to help determine whether the thirty two questions in the questionnaire were reliable. As the questionnaire was developed specifically for this research, pre-testing helped to clarify the questionnaire and statements. Fifty questionnaires were distributed for two weeks in February 2014. The individuals chosen to participate in this pre-test represented the varied disciplines, including managers, professionals, all level of employees and housewives. The respondents were timed on the survey completion and were encouraged to comment on any questions or statements. The main purpose of the pre-testing was to:

- Identify any problems with the survey that could interfere with respondent's ability to answer questions

- Identify any incorrect assumptions on which the questions were constructed

- Solicit suggestion for improvement on the questions and presentation

- Assess the length of time it would take the respondents to complete the survey.

Within two weeks of distribution, only 40 were returned with respondents found no major issues with the survey. The balance of 10 survey forms were not returned and classified as missing.

The results were analysed quantitatively to examine item difficulty, item discrimination and internal consistency. Using Cronbach's alpha to measure internal consistency of the items, those items that did not reach statistical significance were excluded. The initial pool of items was reduced to forty-seven and further statistical analysis was performed and data was collected on February 2014. Reliabilities were measured in all variables. The questionnaires showed acceptable levels of internal reliability and successfully differentiated, therefore meeting the criterion for construct or concurrent validity. Reliability is the extent to which a test yields the same results with repeated trials (Table 3).

Table 3: Reliability of the scales

Section	No. of Items	Cronbach's alpha
Attitude	5	.854
Subjective norms	5	.658
Perceived behaviour control	5	.687

Trust	5	.858
Knowledge	5	.669
Intention to Purchase	7	.851

Reliability test results are range 0.658 to 0.858 which considered as reliable questionnaires. Thus, these questionnaires are accepted for distribution based to Cronbach's alpha measurement. This chapter provided the development of the questionnaire, creation of the data set and questions purposes. In addition, this chapter discuss about conceptual framework, variables, hypothesis development, the research model that used in this research, research design, population and samples, measurement, statistical method and chapter summary. It has aligned questions with the aims and objectives of the research and literature reviewed. The analysis of the result will be discussed from the survey in the next chapter.

IV. Findings

In this section presented description of 200 respondents sample data. Demographic variables are useful for profiling the. The survey data collected will be transforming as useful information for construct the results that will be interpreting the finding. The questionnaires were distributed using direct face to face interaction, mailed through email and online internet survey to the respondents. From the 240 questionnaires distributed, there were only 200 respondent answered the questionnaires. The 200 questionnaire were used as primary data for this, which yielded about 83.3 percent response rate, which are considered sufficient for meaningful data analysis. This section focuses on examining whether backgrounds profile elements namely – gender, age, race, religion, education, income, current telecommunication and telecommunication plan are significantly related to data service provider success. The research also needs to identify whether the elements of background profile factor are influence on mobile telecommunication service provider.

One way ANOVA technique can be used only for numerical data and the element inside on variables is more than two example race, religion, and education, income and current telecommunication.

Table 4 reveals that the age sector does not have an influence on mobile telecommunication service provider. The one way ANOVA table indicates that there is no significant difference in mobile telecommunication service provider and age of the respondent (F=0.960, p= 0.496). The result indicates that there are 49.6 percentages in similarity score by age factor which above than 5 percentages. Since the P value is more than 0.05, thus age group has not significant difference over mobile telecommunication service provider.

Table 4: ANOVA comparing of age and intention to purchase

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.

Ag e	Between Groups	8.923	14	.637	.960	.496
	Within Groups	122.832	185	.664		
	Total	131.755	199			

Table 5 below, explains that there is no significant relationship between religion sector with intention to purchase as f value is 0.535 and p=0.910 which is more than 0.05 and this can be concluded as religion factor has not an impact to intention to purchase. This indicates that the score value for level of religion factor is 91 percentages which is more than 5 percentage. Thus, religion factor have no relationship with intention to purchase.

Table 5: ANOVA comparing of religion and intention to purchase

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Religio n	Between Groups	2.180	14	.156	.535	.910
	Within Groups	53.820	185	.291		
	Total	56.000	199			

Table 6 shown one way ANOVA results that significant level at p=0.300 which is the p value is more than 0.05. The results revealed that there is 30 percentages similarity interest between income level and intention to purchase which more than 5 percentages. This can be concluded that there is no significant difference in income level based on intention to purchase as (F = 1.172, p=0.300). Income level has no influence on intention to purchase.

Table 6: ANOVA comparing of income level and intention to purchase

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.

Income	Between Groups	16.932	14	1.209	1.172	.300
	Within Groups	190.863	185	1.032		
	Total	207.795	199			

As conclusion, from the eight background profile of respondents all factors are not significant to intention to purchase which is the gender score for p=0.848 which is more than 0.05 in significant value. Telecommunication plan for p=0.351 (not significant), age for p=0.496 (not significant), race for p=0.586 (not significant), religion for p=0.910 (not significant), education for p=0.570 (not significant), income for p=0.300 (not significant) and current telecommunication service provider for p=0.408 (not significant). In statistics, the term of "Mean" is "average" which is something that adds together for all the results and then divides with the total number of items in the population. Past studies, identifies in their research which the mean and expected value are used synonymously to one measure of central tendency in probability distribution or random variable characterized by distribution. In data set using of arithmetic mean that something average that refers to central value of a discrete numbers which the sum of the values divided by the total sum items. The arithmetic mean of a set number by $x_1, x_2, ..., x_n$ which typically denote as $\overline{x}$ or x bar. When the set data is series of data of observation by statistical data or sampling then the arithmetic mean is termed by the sample mean (denoted $\overline{x}$) to differentiate to population mean (denoted μ or μ_x) (Bradfield, 1998). Standard deviation in statistics and probability theory (represented by sigma, σ) is dispersion from the average exists. The population correlation coefficient equation between two variables X and Y with expected value of μ_X and μ_Y and standard deviation σ_X and σ_y defined as follow:-

$$\rho_{X,Y} = \operatorname{corr}(X, Y) = \frac{\operatorname{cov}(X, Y)}{\sigma_X \sigma_Y} = \frac{E[(X - \mu_X)(Y - \mu_Y)]}{\sigma_X \sigma_Y},$$

It is found in table 7 that attitude variable score for mean of 3.4720 (sd=0.73397) score for moderate mean. For subjective norm were score moderate mean (mean = 3.3260, sd = 0.64514). Perceived behaviour control is holding moderate mean (mean = 3.3610, sd = 0.60673), trust variable is score for moderate mean score (mean = 3.3610, sd = 0.73623), knowledge variable at moderate mean score (mean = 3.3110, sd=0.73552) and intention to purchase at moderate score of mean at 3.4740, sd=0.50298. Therefore, most of the respondents have the perception to intention to purchase that lead to mobile telecommunication service provider success.

Table 7 - Descriptive (Mean and S. Deviation) Analysis of the variable

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation

Attitude	200	1.00	5.00	3.4720	.73397
Subjective Norm	200	1.40	5.00	3.3260	.64514
Perceived Behaviour Control	200	1.80	5.00	3.3610	.60673
Trust	200	1.00	5.00	3.2260	.73623
Knowledge	200	1.00	5.00	3.3110	.73552
Intention	200	2.00	4.80	3.4740	.50298
Valid N (listwise)	200				

Trust

The elements on trust showed a relatively moderate rating. The mean scores recorded for this element was 3.23. The readings can be interpreted as moderate level of perception and a sign of acknowledgement by the respondents that this element moderate level of contributed towards customer's intention to purchase. This indicates that the average score for this variable is moderate. Majority of respondents has been agreed that trust contributing to customer's intention to purchase towards mobile telecommunication service provider success as an important factor.
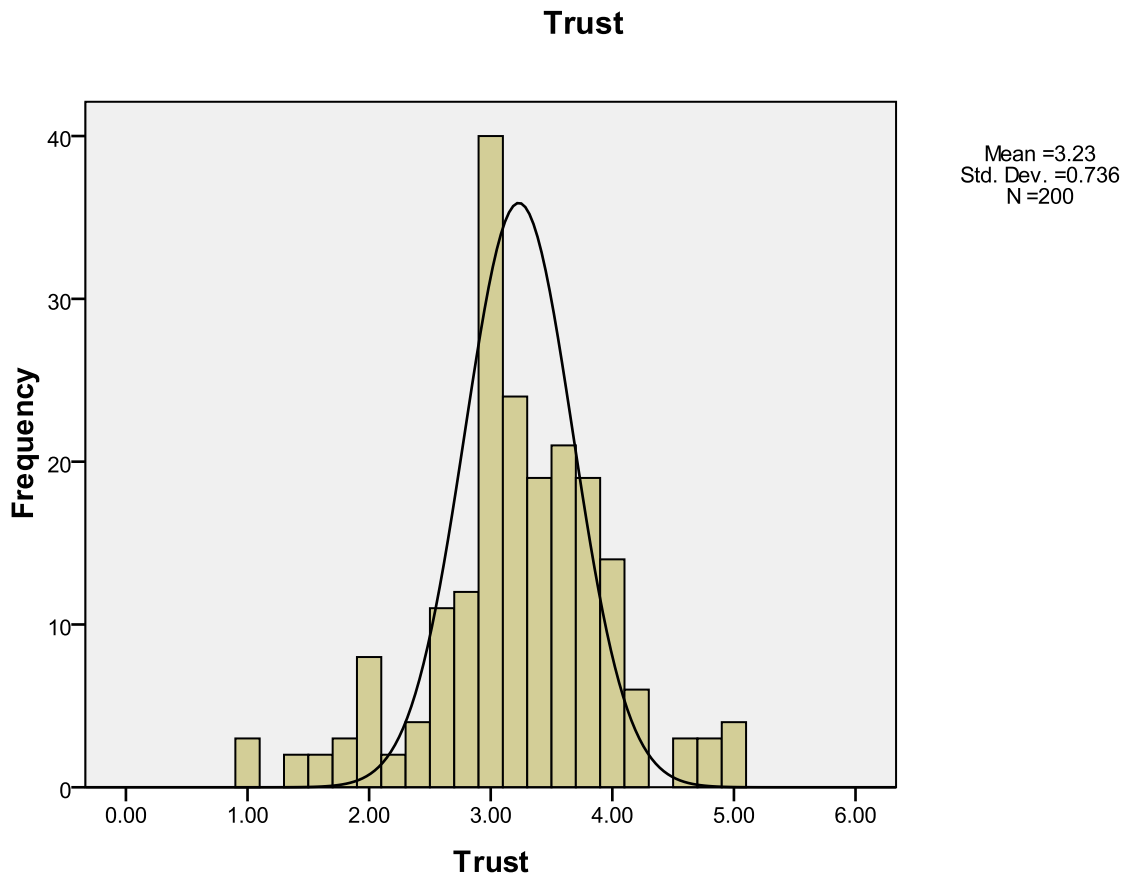
Trust

Mean =3.23
Std. Dev. =0.736
N =200

Figure 2: Trust

Knowledge

Figure 3 shows mean for knowledge variable score at 3.31 and this finding indicate that in moderate level of rating. This revealed that respondents do agree with knowledge that leads to customer's intention to purchase. The "mean" score is 3.31, which indicates that the average score for this variable is moderate level. Majority of respondents has been agreed that their knowledge in selecting to customer's intention to purchase towards mobile telecommunication service provider success as an important factor.
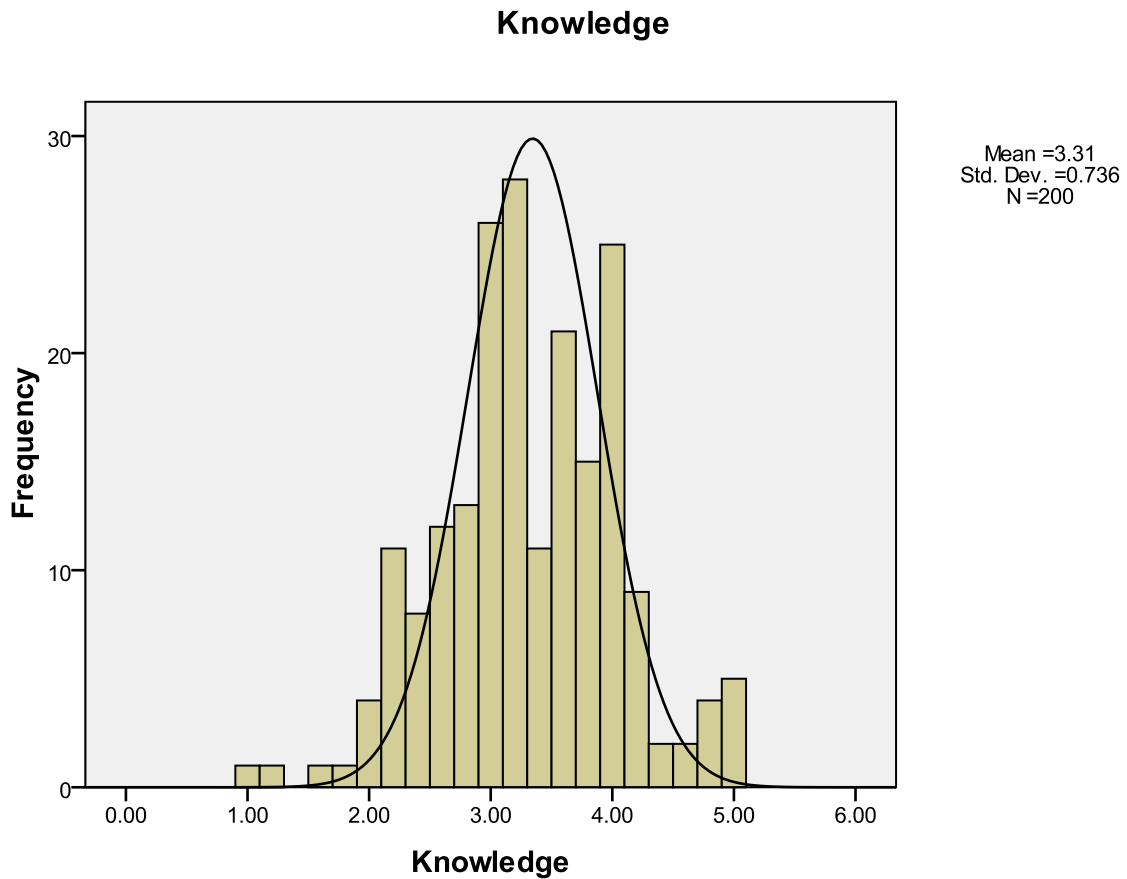
Figure 3: Knowledge

Intention to purchase

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.
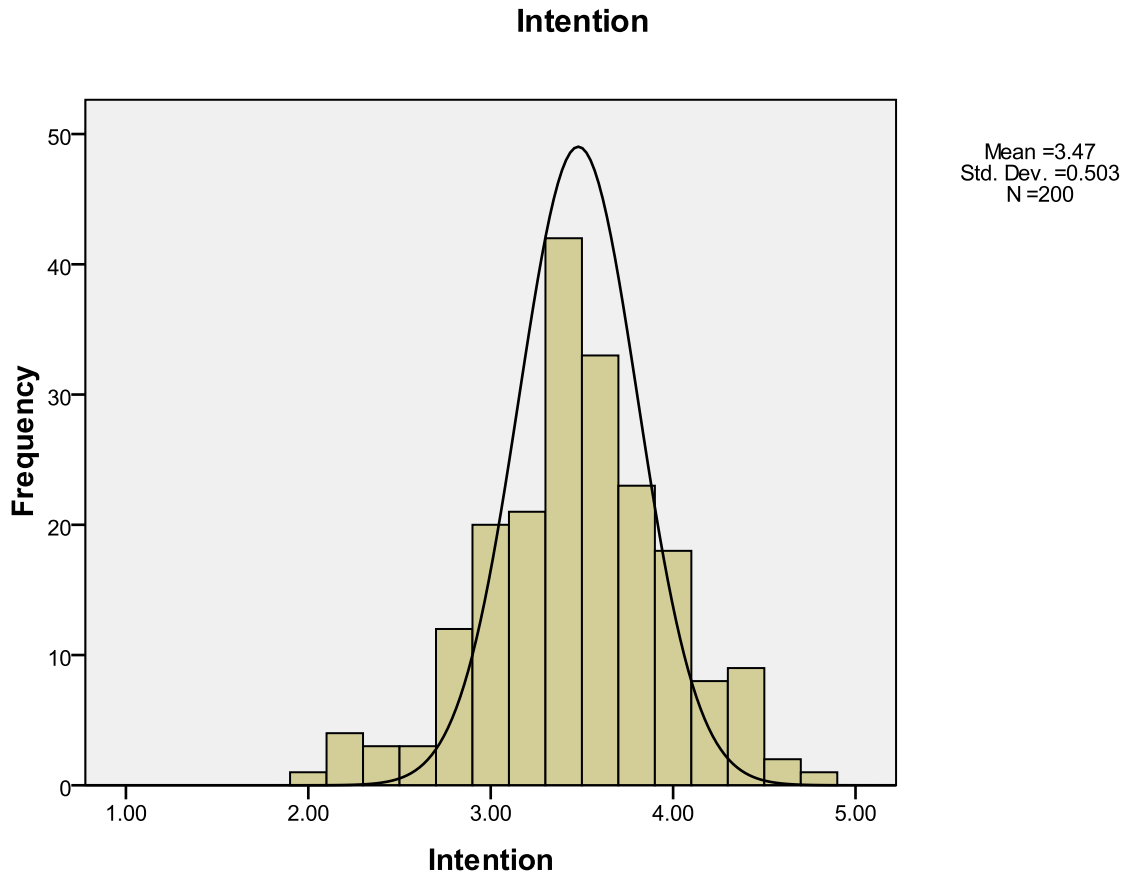
Figure 4: Intention to Purchase

Table 8: Correlation between independent and dependent variable

Correlations							
		Attitude	Subjective_Norm	Perceived_beh_ctrl	Trust	Knowledge	intention
intention	Pearson Correlation	.368**	.619**	.373**	.531**	.751**	1
	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).							

Hypothesis four is to study about relationship between trust and customer's intention to purchase. Below is the hypothesis statement:-

H1: There is a positive and significant nexus among the trust and intention to purchase

Table 8 above shows that the results of Pearson Correlation test has been conducted between two dimensions of trust and customer's intention to purchase. The results state that there is significant value between these two dimensions as the p value smaller than significant value, (p=0.000 which < 0.05). The results revealed that there are 0 percentages in which the respondents did not agree with assurance on customer satisfaction. Therefore, many respondents are in agreed to trust as contributor to customer's intention to purchase. However the direction is not strong enough whereby there is another factor can effect to trust in customer's intention to purchase. Furthermore there is moderate correlation between these two dimensions as correlation coefficient is at (0.531). Thus **H4 is accepted**.

Another hypothesis tends to study the relationship between knowledge and customer's intention to purchase. Below is the hypothesis:-

H2: There is a significant nexus among the knowledge and intention to purchase

Tables 9 show the correlation analysis result of knowledge and customer's intention to purchase. Since both variables are interval, Pearson Correlation test was conducted. There is a positive correlation between critical success factor of knowledge and customer's intention to purchase with significant value of 0.000 which is <0.05. The results revealed that there is zero (0) percentages in which the respondents did not agree with knowledge on customer's intention to purchase. Almost all respondents are in agreed to knowledge that contributes to customer's intention to purchase. The direction is moderate high correlation status whereby there is quite high correlation which majority direction was back up by knowledge in customer's intention to purchase. So **H5 is accepted**. Thus, knowledge and customer's intention to purchase related with a high moderate correlation coefficient is at (0.751).

As a conclusion from the hypothesis testing result; attitude, subjective norm, perceived behaviour control, trust and knowledge was significantly influence the customer's intention to purchase to mobile telecommunication service provider success. All variables have been significantly correlated among them.

Regression analysis on coefficient of determination (R^2)

The results of multiple regression analysis among five independents variable against dependent variable, intention to purchase among respondents can be seen in the table 9. The model summary table shows that R correlation of five independent variables and one moderating variable which are x_1 is attitude (ATT), x_2 is subjective norm (SNM), x_3 is perceived behaviour control (PBC), x_4 is trust (TRT) and x_5 is knowledge (KNW) towards intention to purchase (ITP) are equal to 0.819. After inter-correlation R square (0.819) is generated actually the square of R $(0.671)^2$. This means that 81.9 percent of five independent variables have impact on the dependent variable. In other word, 81.9 percent of variance in intention to purchase was explained by the independent variable. Based on rule of thumbs, the remaining of 18.1 percent cannot be explained by the regression analysis.

Table 9: Regression analysis on Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819[a]	.671	.662	.40633

a. Predictors: (Constant), Knowledge, Perceived_beh_ctrl, Attitude, Subjective_Norm, Trust

ANOVA is a statistical technique for examining the differences between two or more populations. F test is a statistic which is used to test equality of the variance of two populations. The ANOVA table shows that the F value of 78.548 is significant at the 0.000 level. This result reflects that 81.9 percent of the variance (R-square) in data service provider success has been significantly illustrated by the five independent variables and one mediating variable.

Table 10: Regression Analysis of ANOVA test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.842	5	12.968	78.548	.000[a]
	Residual	31.864	193	.165		
	Total	96.706	198			
a. Predictors: (Constant), Knowledge, Perceived_beh_ctrl, Attitude, Subjective_Norm, Trust						
b. Dependent Variable: intention						

V. Conclusion and Recommendation

Essentially, majority respondents in this study having bachelor for 127 respondents (63.5%) as more than half of the total respondents as compared to other level of education. This indicates that the current trend of bachelor degree holder highly usage of mobile telecommunication for communicate and searching for related issues in internet. Second largest of respondents are Diploma holder for 36 respondents (18%), Master for 25 respondents (21.5%) and school certificate for 12 respondents (6%). Based on this survey, the active and largest usage of telecommunication line is bachelor degree holder in which can be identified as largest spending for mobile telecommunication line in Malaysia.

Respondents' yearly income as a total number of 73 respondents (36%) have the income between RM3,001 to RM6,000 per month, followed by 48 respondents (24%) for income range RM6,001 to RM10,000, 43 respondents (21.5%) for income of RM3,001 and below and 37 respondents (18.5%) income of above than 10,000 per month. Conclusively, this analysis shows that customers from middle income are dominant and active users of mobile telecommunication, hence indicating that these groups can be the main business target in term of improving and expanding the development marketing strategy.

In this study, majority of the respondents are subscribe of mobile telecommunication line of Celcom for 87 respondents (43.5%), followed by Maxis for 71 respondents (35.5%), Digi for 28 respondents (14%) and U-Mobile for 14 respondent (7%). The demand for the latest technologies of phone quite high and respondent agrees that the telecommunication generation is important factor for customer to put in consideration. The telecommunication plan for mobile telecommunication were recorded that the prepaid plan is largest by 141 respondent (70.5%) and post-paid plan for 59 respondents (29.5%). Majority of respondents agree that the less commitment on monthly basis and lower price basis of mobile telecommunication provider will have more demand and this is sign the respondents are particular about the pricing of products. The price fluctuation will significantly effect to the demand due to pricing sensitivity would motivate customer to swift the telecommunication line to other operator who offer slightly lower price.

The first hypothesis being tested is trust. The result of study stated that customer's trust has significant effect on intentional behaviour. This variable correlation coefficient r=0.531 at significant level of 0.000. Score for correlation coefficient at 0.531 and indicates that the perception level of customer at 53.1% towards intention to purchase. The customers trust is consider as moderate correlation between both of variables. Trust is based by individual willingness to depend on another party. Thus, individual has willing to put his/her trust to those particular product then they will buy that product. In this case, trust of people is increase the intention also will follow to increase and subsequently intention to buy will then follow. This result is supported by previous study by Tilden, F. (1977) on the study of customer service to customer's satisfaction.

The final hypothesis being tested is knowledge. This hypothesis is to examine the relationship between knowledge toward intentional behaviour. There is positive correlation between critical success factor of knowledge toward intention to purchase with significant value of 0.000 which is below 0.05 and coefficient correlations at 0.751 which is considered as moderate high correlation between both of variables. It indicates that the customer's confident level and perception level is at 75.1% towards intention to purchase and this is among highest score between all the variables. Thus, this hypothesis show that knowledge was significantly influences intention to purchase.

This is one of the most important and desired qualities between a knowledge level and its customers. As people education especially in mobile telecommunication knowledge are major mechanism that assisting their belief and intention to purchase. Malaysia Higher Education statistics show that in 2009 total students' graduation are 1,050,726 people around Malaysia from diploma until PhD. This indicates that the growths of knowledgeable people in Malaysia are increasing every year. According to past studies indicate that a preliminary study has pointed out that knowledge as key ingredient to influence in intention to purchase. This statement was proven with the results in this research on people acceptance are significant in intention to purchase of mobile telecommunication services. Knowledge reflects social believe to perform certain behaviour in mobile telecommunication services. The finding is also consistent with past studies that knowledge was positively related to belief.

From the five independent variables being tested, it indicates that all the variables have been positively significant correlated with significant level of 0.000 which is below than 0.05. The highest impact score for correlation coefficient is knowledge variable for r=0.751, follow by subjective norms for r-0.619, trust for r=531, perceived behaviour control for r=0.373 and the least impact score is attitude for r=0.368. To identify the factors influencing the selection of telecommunication service provider by Malaysian customers. As discussed in past section, the aim of this research is to identify the factors influencing the selection of telecommunication service provider by Malaysian customers

Table 11: Multiple regression

Dependent Variable	Independent Variable	Direction of the relationship	Standardized Coefficients Beta	Significant P-value
Intention to purchase	Attitude	Negative	-.060	.253
	Subjective norms	Positive	.373	.000
	Perceived behaviour control	Positive	.040	.455
	Trust	Negative	-.008	.891
	Knowledge	Positive	.602	.000

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819[a]	.671	.662	.40633

a. Predictors: (Constant), Knowledge, Perceived_beh_ctrl, Attitude, Subjective_Norm, Trust

To explain about factor influencing the selection of telecommunication service provider by Malaysian customers, the results from regression analysis explained on how the typically of the dependent variable changes when any one of the independent variables is varied. This technique of modelling in examines the value of intention to purchase changes when one of independent variable (attitude, subjective norms, perceived behaviour control, trust and knowledge) was varied. Significantly, the changes of independent variable will effect of customer perception and acceptance in intention to purchase. However, this technique will examine on regression coefficient of determination (R^2) which is state how much the total of study can be explained in people perception and acceptance in intention to purchase of lifelong education. Finally multiple regression analysis is to find the impact of independent variable towards dependent variables.

Form the table 11 above, the score for regression coefficient of determination (R^2) is 0.819. This indicates that there are 81.9 percent of five independent variables (attitude, subjective norms, perceived behaviour control, trust and knowledge) have impact on the dependent variable (Intention to purchase). In other word, 81.9 percent of variance in intention to purchase was explained by the independent variable. In simple words, attitude, subjective norms, perceived behaviour control, trust and perceived usefulness have creating intention and perception towards of intention to purchase. The balance of 18.1 percent

cannot explain by the regression analyses which there are another factor in influence of customer perception that have not been identified.

The most influential factor in performing of intention to purchase is knowledge with highest beta for $\beta=0.602$ and $p<0.000$. This indicates that knowledge factor is a major influence factor towards intention to purchase. The result is consistent with the present study by past studies. This can be concluded that people's knowledge can influence intention to perform. Today, people who have higher knowledge are increasing every year and this knowledge allows people to decide to choose from various mobile telecommunication providers. Knowledge is another factor that influences people to perform in intention to purchase. As people education especially in mobile telecommunication is major mechanism that assisting their belief and intention to purchase of mobile telecommunication services.

Managerial Implications

Finding of this study will primary beneficial to government agencies, policy maker, marketer, companies and higher management of telecommunication provider by creating insight into customer perception and finally building intentional behaviour to purchase the product. This research provides valuable insight for mobile telecommunication provider and government agencies by indicating intentional behaviour as the most important dominants of creating intention to purchase among the five predictors. The findings of the study suggest that creating a positive intention to purchase towards mobile telecommunication services as consideration for mobile telecommunication provider to increase consumer's purchase intention. These give the management an insight to develop effective marketing strategies to satisfy that value of potential customers. Past studies stated that different marketing approaches or technique should be used to stimulate sales. Thus, today the higher management of mobile telecommunication producer should using creativity and new technique in term of approaching their sales to compete with others health products producer.

Some product pricing is very sensitive; some product price is not much effect the demand and some product the higher the better. But in mobile telecommunication services the company needs to identify the pricing in relevant to the market situation as pricing is much very sensitive and concern because every year the prices are increased. In this reason many of people are looking alternative product or services which offering cheaper. In this circumstance, people intend to create their own attitude and also spread news to their family, relative and friend as influence factors that create consumer behaviour. Promotion strategy is very popular in many companies and it's proven to make customer awareness about product or services in market. This strategy has two main strategies known as "pull" and "push" strategy. Pull strategy is by promotion thru advertising and consumer promotion to build up demand. For instance Petronas, was involved in petroleum makes further step by doing and investing in the promotion by advertising in newspaper, television, radio or billboard and also doing with membership card to sustain in the market. Whereby push strategy is to make use company sales force activities to make customer demand. This strategy is using distribution strategy as tools to create demand.

VI. Future Research and Limitations

An analysis of this survey's results on the customer's intention to purchase behaviour has shown that the five elements in independent variables are good predictors of the customer's intention to purchase behaviour. Therefore, this implies that the customer's level of intention to purchase behaviour can be improved if the attributes of these dimensions are met.

There are two limitations observed in this study. First, the study only covered the area of Kuala Lumpur. The sample size was small. As such, the results cannot be used to represent the whole population. Questionnaire distributions to other region are restricted as the questionnaires were administered by a representative in that state. Past studies suggested that the study

should be done in the fast growth cities that linked to the high usage of telecommunication service. The other cities that may related or linked such as Tawau, Kota Kinabalu, Ipoh, Penang, Putrajaya, Johor Bahru, Melaka, Kajang, Ipoh to name a few.

REFERENCES

[1] Aziz, Y. A., & Chok, N. V. (2013). The role of Halal awareness, Halal certification, and marketing components in determining Halal purchase intention among non-Muslims in Malaysia: A structural equation modeling approach. *Journal of International Food & Agribusiness Marketing, 25*(1), 1-23.

[2] Casaló, L. V., Flavián, C., & Guinalíu, M. (2010). Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioral intentions. *Tourism Management, 31*(6), 898-911.

[3] Chen, M.-F., & Tung, P.-J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management, 36*, 221-230.

[4] Hsu, C.-L., & Lin, J. C.-C. (2015). What drives purchase intention for paid mobile apps?–An expectation confirmation model with perceived value. *Electronic Commerce Research and Applications, 14*(1), 46-57.

[5] Hussain, M. S., Mosa, M. M., & Omran, A. (2017). The Mediating Impact of Profitability on Capital Requirement and Risk Taking by Pakistani Banks. *Journal of Academic Research in Economics, 9*(3), 433-443.

[6] Hussain, M. S., Mosa, M. M., & Omran, A. (2018). The impact of owners behaviour towards risk taking by Pakistani Banks: Mediating role of profitability *Journal of Academic Research in Economics, 10*(3), 455-465.

[7] Hussain, M. S., Musa, M. M., & Omran, A. (2019). The Impact of Regulatory Capital on Risk Taking By Pakistani Banks. *SEISENSE Journal of Management, 2*(2), 94-103.

[8] Hussain, M. S., Musa, M. M. B., & Omran, A. A. (2018). The Impact of Private Ownership Structure on Risk Taking by Pakistani Banks: An Empirical Study. *Pakistan Journal of Humanities and Social Sciences, 6*(3), 325-337.

[9] Hussain, M. S., Ramzan, M., Ghauri, M. S. K., Akhtar, W., Naeem, W., & Ahmad, K. (2012). Challenges and failure of Implementation of Basel Accord II and reasons to adopt Basel III both in Islamic and conventional banks. *International Journal of Business and Social Research, 2*(4), 149-174.

[10] Khatibi, A. A., Ismail, H., & Thyagarajan, V. (2002). What drives customer loyalty: An analysis from the telecommunications industry. *Journal of Targeting, Measurement and Analysis for Marketing, 11*(1), 34-44.

[11] Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research, 65*(10), 1480-1486.

[12] Kim, H.-b., Kim, T. T., & Shin, S. W. (2009). Modeling roles of subjective norms and eTrust in customers' acceptance of airline B2C eCommerce websites. *Tourism Management, 30*(2), 266-277.

[13] Kim, Y., & Han, H. (2010). Intention to pay conventional-hotel prices at a green hotel–a modification of the theory of planned behavior. *Journal of Sustainable Tourism, 18*(8), 997-1014.

[14] Manning, M. (2009). The effects of subjective norms on behaviour in the theory of planned behaviour: A meta-analysis. *British journal of social psychology, 48*(4), 649-705.

[15] Mohseni, S., Jayashree, S., Rezaei, S., Kasim, A., & Okumus, F. (2018). Attracting tourists to travel companies' websites: the structural relationship between website brand, personal value, shopping experience, perceived risk and purchase intention. *Current Issues in Tourism, 21*(6), 616-645.

[16] Nawaz, M. A., Afzal, N., & Shehzadi, K. (2013). Problems of formally employed women: A case study of Bahawalnagar, Pakistan. *Asian Journal of Empirical Research, 3*(10), 1291-1299.

[17] Nawaz, M. A., Azam, M. A., & Bhatti, M. A. (2019). Are Natural Resources, Mineral and Energy Depletions Damaging Economic Growth? Evidence from ASEAN Countries. *Pakistan Journal of Economic Studies, 2*(2), 15-28.

[18] Nawaz, M. A., & Hassan, S. (2016). Investment and Tourism: Insights from the Literature. *International Journal of Economics Perspectives, 10*(4), 581-590.

[19] Pookulangara, S., & Koesler, K. (2011). Cultural influence on consumers' usage of social networks and its' impact on online purchase intentions. *Journal of Retailing and Consumer Services, 18*(4), 348-354.

[20] Smith, S., & Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal (AMJ), 18*(2), 93-104.

[21] Song, J., & Kim, Y. J. (2006). Social influence process in the acceptance of a virtual community service. *Information Systems Frontiers, 8*(3), 241-252.

[22] Sreen, N., Purbey, S., & Sadarangani, P. (2018). Impact of culture, behavior and gender on green purchase intention. *Journal of Retailing and Consumer Services, 41*, 177-189.

[23] Teng, Y.-M., Wu, K.-S., & Liu, H.-H. (2015). Integrating altruism and the theory of planned behavior to predict patronage intention of a green hotel. *Journal of Hospitality & Tourism Research, 39*(3), 299-315.

[24] Wu, J., & Liu, D. (2007). The effects of trust and enjoyment on intention to play online games. *Journal of electronic commerce research, 8*(2), 178-191.

[25] Yazdanpanah, M., & Forouzani, M. (2015). Application of the Theory of Planned Behaviour to predict Iranian students' intention to purchase organic food. *Journal of cleaner production, 107*, 342-352.

[26] De Silva A.D.A., Khatibi A., Azam S.M.F. (2018a). Can parental involvement mitigate swing away from science? Sri Lankan perspectives, Cogent Education

[27] De Silva A.D.A., Khatibi A., Azam, S. M. F. (2018b). Do the Demographic Differences Manifest in Motivation to Learn Science and Impact on Science Performance? Evidence from Sri Lanka, International Journal of Science and Mathematics Education

[28] Delafrooz N., Paim L.H., Khatibi A. (2009). Developing an instrument for measurement of attitude toward online shopping, European Journal of Social Sciences

[29] Dewi N.F., Azam, S. M. F., Yusoff S.K.M. (2019). Factors influencing the information quality of local government financial statement and financial accountability, Management Science Letters

[30] Doa N.H., Tham J., Khatibi A.A., Azam S.M.F. (2019). An empirical analysis of Cambodian behavior intention towards mobile payment. Management Science Letters

[31] Maghfuriyah A., Azam, S. M. F., Shukri S. (2019). Market structure and Islamic banking performance in Indonesia: An error correction model, Management Science Letters

[32] Nguyen H.N., Tham J., Khatibi A., Azam S.M.F. (2019). Enhancing the capacity of tax authorities and its impact on transfer pricing activities of FDI enterprises in Ha Noi, Ho Chi Minh, Dong Nai, and Binh Duong province of Vietnam , Management Science Letters

[33] Nikhashemi S.R., Paim L., Haque A., Khatibi A., Tarofder A. K. (2013). Internet technology, Crm and customer loyalty: Customer retention and satisfaction perspective , Middle East Journal of Scientific Research

[34] Nikhashemi S.R., Valaei N., Tarofder A. K. (2017). Does Brand Personality and Perceived Product Quality Play a Major Role in Mobile Phone Consumers' Switching Behaviour? Global Business Review

[35] Pambreni Y., Khatibi A., Azam, S. M. F., Tham J. (2019). The influence of total quality management toward organization performance, Management Science Letters

[36] Pathiratne S.U., Khatibi A., Md Johar M.G. (2018). CSFs for Six Sigma in service and manufacturing companies: an insight on literature, International Journal of Lean Six Sigma

[37] Rachmawati D., Shukri S., Azam, S. M. F., Khatibi A. (2019). Factors influencing customers' purchase decision of residential property in Selangor, Malaysia , Management Science Letters

[38] Seneviratne K., Hamid J.A., Khatibi A., Azam F., Sudasinghe S. (2019). Multi-faceted professional development designs for science teachers' self-efficacy for inquiry-based teaching: A critical review, Universal Journal of Educational Research

[39] Sudari S.A., Tarofder A.K., Khatibi A., Tham J. (2019). Measuring the critical effect of marketing mix on customer loyalty through customer satisfaction in food and beverage products, Management Science Letters

[40] Tarofder A.K., Azam S.M.F., Jalal A. N. (2017). Operational or strategic benefits: Empirical investigation of internet adoption in supply chain management, Management Research Review

[41] Tarofder A.K., Haque A., Hashim N., Azam, S. M. F., Sherief S. R. (2019). Impact of ecological factors on nationwide supply chain performance, Ekoloji

[42] Tarofder A.K., Jawabri A., Haque A., Azam S.M.F., Sherief S.R. (2019). Competitive advantages through it-enabled supply chain management (SCM) context, Polish Journal of Management Studies

[43] Tarofder A.K., Nikhashemi S.R., Azam S. M. F., Selvantharan P., Haque A. (2016). The mediating influence of service failure explanation on customer repurchase intention through customers' satisfaction, International Journal of Quality and Service Sciences

[44] Udriyah, Tham J., Azam, S. M. F. (2019). The effects of market orientation and innovation on competitive advantage and business performance of textile SMEs, Management Science Letters

[45] Ulfah R., Amril Jaharadak A., Khatibi A.A. (2019). Motivational factors influencing MSU accounting students to become a certified public accountant (CPA), Management Science Letters