Study on Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Malaysia

Nurdaulet Nurysh, Navaz Naghavi, Benjamin Chan Yin Fah

Abstract: The wireless telecommunication industry in Malaysia demonstrates evident signs of a consistently changes in industry paradigm and signs of moving market. Since the rapid growth of wireless technologies and high demand of consumers for more advanced wireless services, the standard of wireless telecommunication services is moving from voice-centered communication to a series of the high-speed data communication and multimedia. This study is an acknowledgement to the request by previous researchers on the need to examine the important factors such as perceived value and service quality that can directly affect the customer satisfaction in Malaysian mobile phone operator. The moderating effect of attractiveness of alternatives has been also tested between variables. Therefore, the empirical findings, which are based on quantitative research and further multiple regression analysis, shows that both perceived value and service quality has positive relationship towards customer satisfaction. But, the moderator was found that the interaction of both variables with Attractiveness of alternatives has no effect to improve or enhance the satisfaction.

Keywords: Customer Satisfaction, Service Quality, Perceived Value, Attractiveness of Alternatives, multiple regression analysis.

I. INTRODUCTION

Customer satisfaction is vital for business sustainability. As Wells and Prensky (1996) commented that if customers are satisfied with service/product and receive good thoughts after use, therefore they would involve in a repeat purchase and try to increase line extension.Therefore, improving the level of customer satisfaction is essential for an organization since satisfied customers may bring many benefits for organizations such as sharing positive recommendations through word of mouth. Moreover,satisfied customers would be able to make long-term profitable relationship with the brand. Today, telecommunication networks in order to achieve superior economic success, it is crucial to keep satisfy customers and increase their loyaltyMosahab, Mahamad and Ramayah (2010) came to the fact that success of service providers depends on the long-term relationship with customers which is determined by customer satisfaction and loyalty. There are a lot of research have done on the factors affecting customer satisfaction on mobile telecommunication in various location as well as in Malaysia. The mobile telecommunication industry process began in 1987 and the privatisation in 1990.

Therefore, many foreign investors interested to expand their funds in Malaysia's telecom sector. Further, new players, such as Maxis and DiGi, challenged its dominance and fierce competition increase (Telekom Malaysia Berhad, 2000). A few years ago, in total seven licensed network companies exist that contribute to Malaysian telecommunication industry. They are Maxis Broadband, namely Telekom Malaysia Berhad, TT dot com, Celcom Transmission Sdn. Bhd., DiGi, Fiberail Sdn. Bhd. and Prismanet (M) Sdn. Bhd.

The Malaysian telecommunications industry related to both fixed and mobile service providers has illustrated a very rapid growth, especially in the last decade. The mobile phone penetration rate increase from 142.5% in 2012 to 143.4% in the second quarter of 2013, clearly show that mobile telecommunication services are successful among Malaysians owning various subscriptions (Hogan et al., 2003; Lee-Kelly et al., 2003).A previous report of Malaysian Communications and Multimedia Commission, SKMM (2013) mentioned that by the second quarter of 2013, mobile phone subscriptions reach 42.6 million, including post-paid and pre-paid subscriptions in Malaysia. In this competitive market, mobile service providers need to attract new customers in order to get a greater share of the market as well as to retain their current customers.

The wireless telecommunication industry in Malaysia demonstrates evident signs of a consistently changes in industry paradigm and signs of moving market. According to Upadhyay (2016), Connected Consumer Survey 2016 established that Malaysians are unhappy with about poor data speeds and coverage, pricing and perceived value. Due to the market changes and customer demands, the common business standards of wireless telecommunication providers were seriously affected by the extensive use of Over-the-Top (OTT) applications such as Viber, WhatsApp Messenger, and WeChat (Sidhu, 2012).According to Ovum, the service providers have spent US $13.9 billion and the US $8.7 billion a year earlier in loss of SMS income due to increased use of OTT communications by consumers.

II. LITERATURE REVIEW

Factors of Customer Satisfaction

Different factors have the different impact on customers. Sendecka and Nysveen (2006), found that more customized, specific or better-tailored services that meet customer's needs and expectations would lead to a high level of customer satisfaction. Negi (2009) and Rahman et al. (2011),

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acknowledged network quality as one of the relevant factors in terms of evaluating service quality in determining the overall customer satisfaction. As some companies give higher value in terms of charges, then the level of satisfaction gets higher that drive customers to be loyal. Langley C. John & Holcomb Mary C. (1996) committed that companies have opportunity to increase customer satisfaction through creating customer value by many ways, such as by providing to the customers the comparative net value, effectiveness, efficiency, and differentiation of services, which can be delivered via logistics. Indeed, the increasing number of alternatives industry especially mobile telecom industry leads to a competitive environment where customers tend to switch more from one company to another company based on availability of service or product which satisfy their needs.

Service Quality

Negi (2009) and Rahman et al. (2011), acknowledged network quality as one of the relevant factors in terms of evaluating service quality in determining the overall customer satisfaction. According to Chen et al. (2011) poor network quality can leads to less costumer satisfactions on mobile phone operators, subsequently that increases the number of complaints against the operators. Chen, Lu, Gupta and Xiaolin (2014) conducted a survey on 783 mobile subscribers in China. The results of the survey showed that low-quality network service leads to more dissatisfaction among mobile phone subscribers and increase the tendency to change to the other network operators. Thus, low network quality increases the quantity of complaints undoubtedly which then lead to high customer dissatisfaction. In this regard, mobile operators must have to ensure strong network quality to satisfy their subscribers. Therefore, we have proposed the following hypothesis:

Ho1: There is no correlation between service quality and customer satisfaction
Ha1: There is a correlation between service quality and customer satisfaction
Ho2: There is no relationship between service quality and customer satisfaction
Ha3: There is relationship between service quality and customer satisfaction

Perceived Value

Mobile services providers are investing in huge amount but still there are, mismatches in the actual and perceived value of the customer; survey which is done by Barnhoom C. (2006), shows that there is a progress, nonetheless, perceived value from the telecom operators has the lowest score. This has increased from 71% in 2005 to 76% in 2006. Langley C. John & Holcomb Mary C. (1996) committed that companies have opportunity to increase customer satisfaction through creating customer value by many ways, such as by providing to the customers the comparative net value, effectiveness, efficiency, and differentiation of services, which can be delivered via logistics. Anderson E. W., Fornell C and Lehmann D. R. (1994), McDougall, G. H. and Levesque T. (2000), Ravald, A. and C. Gronroos (1996) find that perceived value is the signifacnt determination of customer satisfaction and Turel, O. and A. Serenko (2006),

in their survey of mobile services Canada suggested that the degree of perceived value is one of the main factors affecting customer satisfaction.

Based on the above research perceived value can be defined as overall of service quality related to the price paid and service received.

Ho4: There is no correlation between perceived value and customer satisfaction
Ha4: There is correlation between perceived value and customer satisfaction
Ho5: There is no relationship between perceived value and customer satisfaction
Ha5: There is relationship between perceived value and customer satisfaction

Attractiveness of alternatives

One of the investigations by Yu-Xiang Yen and Der-JuinnHorng (2010), they explored the antecedents of customers' supplier intention to switch in business-to-business they examined the relationship between switching intention and its antecedents. The result of the study proved that reduced customer satisfaction directly increases the switching intention and therefore attractiveness of alternatives affects negatively towards customer satisfaction. Moreover, a similar investigation was done by Lien and Kao (2008), showed that under high attractiveness of alternatives the both of quality are important determinants of satisfaction for the utilitarian service. But under low attractiveness of alternatives only technical quality is significant in the determination of satisfaction for both services.

Ho3: Attractiveness of alternatives does not play a significant role in relationship between service quality and customer satisfaction
Ha3: Attractiveness of alternatives does play a significant role in relationship between service quality and customer satisfaction
Ho6: Attractiveness of alternatives does not play a significant role in relationship between perceived value and customer satisfaction
Ha6: Attractiveness of alternatives does play a significant role in relationship between perceived value and customer satisfaction

III. METHODOLOGY

Sample

The target population of this study is workers in Malaysia whereby the sample taken is workers in University or other institutions. Respondents of the questionnaire should be using mobile operators because the research based on mobile telecommunication industry. Thus, this research has been used non-probability sampling because this research does not have the required name list and the survey had given to the respondent randomly. The total number of respondent were calculated using online sample size calculator - Raosoft to compute the recommended sample size.

The recommended sample size from the Raosoft software is 384 with the margin of error of 5% and the confident level of 95%. Due to the time limitation of this research, the actual number of respondent was decreased to 110 and according to the Raosoft calculation; the margin of error will be 9.80% if the sample size is 110 only.

Measures and Analysis

The way of datacollected as primary research. It has been done through using quantitative data collection method which is a survey, by distributing questionnaires to the selected samples.According to Fellegi (2003), a survey is any activity that collects information in an organized and methodical manner about characteristics of interest from some or all units of a population using well-defined concepts, methods and procedures, and compiles such information into a useful summary form. The choosing of this research method is reducing cost of the research and easy to collect the information and understand. Indeed, quantitative data enables the researcher to estimate and analyze data. This type of data can be used to construct graphs and tables of raw data, it has helped us to explore, present, describe and examine relationship and examine relationships and bias within out data.The relationship between an independent and dependent variable needs to be studied in detail, through analysis to find out the relationships between variables (Jones, 2016). Also, there is a moderator which has been used in this study in order to test whether it is effects or not. All the variables were measured by 18 items of questionnaire which was adapted from valuable researchers such as Khan (2012), Sahadev and Edward (2011), McDougall (2000) and Ping (1993) (Appendix 1). Therefore,the questionnaire has been used 5-Point Likert Scale (1=Strongly Disagree; 5=Strongly Agree).
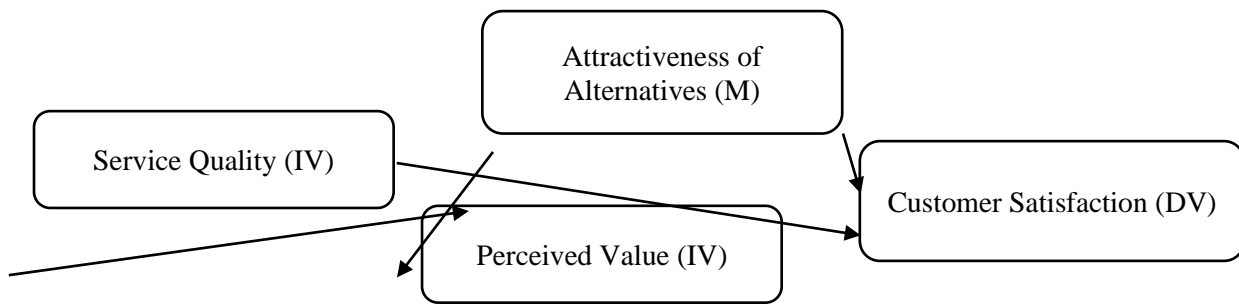

Figure 1: Research Model

The figure 1 above illustrates the model of this research. In this study, primary data collection has been implemented to distribute the total 110 questionnaires among respondents through online and offline distribution. The survey questionnaire which was created from Google Form and has been well contributed in order to distribute online survey through social networks such as Facebook and Whatsapp. For the offline distribution, the questionnaires have been spread in the most crowded places of Asia Pacific University of Technology and Innovation such as the library, cafeteria as well as classrooms.

IV. RESULTS

The main purpose of this research is to determine factors that may affect Customer Satisfaction Mobile Telecommunication sector of Malaysia. In order to reach this aim, several specific objectives were developed in the initial stage of this work. Particularly, the aim of this study is to investigate the relationship between potential factors that may affect customer satisfaction. Thus, the data has been collected successfully from 110 respondents which occupy 100% of response rate. Based on the collected questionnaire, there are 54 male respondents and 56 female respondents out of 110 respondents that participated in this research. The percentage of male respondents is 49.1% while the percentage of female respondents is 50.9% which describes that there is no gender slope in this study as the outcome of research is almost average. The majority of respondents are in the age group between 18 years and below (55.5%), while 40.9% of respondents are between 19 to 25 years. Furthermore, 1.8% of the respondents aged between 26 to 30 years and 0.9% are 31 to 40 years. Lastly, the remaining respondents fall under 40 years and above with results of 0.9%. In terms of nationality, the 61.8% of the overall respondents are international students (Foreign) while the remaining 38.3% of the respondent's rate are local students (Local). The unbalanced outcome might be due to that University basically composed of more international students rather than local students. In this part will be given data that relevance to which mobile operator respondents are using most. the highest rate indicates Umobile with results of 45.5%, which means that most of the respondents are using Umobile operator. Meanwhile, there are 23.6% of respondents are using Maxis and 12.7% of the respondents using Digi. It is then followed by 11.8% who are using the Celcom operator. Last but not at least, there are 6.4% of the respondents who are using different mobile operators such as Hotline, Redone and Tunetalk.

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Table 1: Spearman's Correlation Coefficient for Service Quality

			Customer Satisfaction	Service Quality
Spearman's rho	Customer Satisfaction	Correlation Coefficient	1.000	.714**
		Sig. (2-tailed)	.	.000
		N	110	110
	Service Quality	Correlation Coefficient	.714**	1.000
		Sig. (2-tailed)	.000	.
		N	110	110

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

Table 2: Spearman's Correlation Coefficient for Perceived Value

			Customer Satisfaction	Perceived Value
Spearman's rho	Customer Satisfaction	Correlation Coefficient	1.000	.443**
		Sig.(2-Tailed)	.	.000
		N	110	110
	Perceived Value	Correlation Coefficient	.443**	1.000
		Sig. (2-Tailed)	.000	.
		N	110	110

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

Table 3: Spearman's Correlation Coefficient of Attractiveness of Alternative

			Customer Satisfaction	Attractiveness of Alternatives
Spearman's rho	Customer Satisfaction	Correlation Coefficient	1.000	.178
		Sig. (2-tailed)	.	.063
		N	110	110
	Attractiveness of Alternatives	Correlation Coefficient	.178	1.000
		Sig. (2-tailed)	.063	.
		N	110	110

The value of Cronbach's Alpha for 6 questions of Customer Satisfaction demonstrates with an outcome of 0.788 and 5 questions for service quality has shown the result 0.828. The value of Cronbach's Alpha on the 3 questions of Perceived Value is recognized highly reliable as the result demonstrates that the value scored 0.912. Finally, the Attractiveness of Alternatives with Cronbach's Alpha value of 0.848 shows that is most similar with second Cronbach's Alpha value of Service Quality. Importantly, when a Cronbach's Alpha scale scores 0.70 or larger, the scale is considered as a reliable.

The validity of the statistical procedures depends on an assumption of normality. Thus, the normality test has been taken seriously because it is impossible to conclude the reality in an accurate and reliable way when these assumptions are not fulfilled (Ghasemi, 2012). In this study, following methods are included to test for normality such as mean, standard deviation, skewness as well as kurtosis (Appendix 2).

Table 4: Regression Analysis for Service Quality, Attractiveness of Alternatives and Customer Satisfaction

Dependent Variable – Customer Satisfaction	Regression Coefficient	Standard Error	T	P-Value
Constant	3.4092	0.0493	69.1107	0.0000
Attractivness Of Alternatives (M)	0.0460	0.0927	0.4964	0.6206
Service Quality (Iv)	0.7382	0.0893	8.2636	0.0000
Interaction	-0.0215	0.1172	-0.1834	0.8548

Table 5: Regression Analysis for Perceived Value, Attractiveness of Alternatives and Customer Satisfaction

Dependent Variable – Customer Satisfaction	Regression Coefficient	Standard Error	T	P-Value
Constant	3.4044	0.0611	55.6969	0.0000
Attractiveness of Alternatives (M)	0.1565	0.1231	1.2710	0.2065
Perceived Value (Iv)	0.3836	0.0797	4.8107	0.0000
Interaction	0.0475	0.1096	0.4338	0.6653

Firstly, preliminary analysis shows that there is a strong correlation between Service Quality and Customer Satisfaction (rs =0.714, p=0.000). Afterwards regression analysis was run. More specifically, it reveals that there is a positive relationship between Service Quality and Customer Satisfaction (t=8.2636, p=0.0000). Consequently, we may conclude that Service Quality has a positive effect on Customer Satisfaction. Therefore, first and second settled objective was achieved, Ha1 and Ha2 were supported. Indeed, these findings contribute to the past empirical works conducted in hotel industry by Amin, et. al (2013), pointed out that service quality dimensions such as hotel ambience (p=0.000*), staff performance (p=0.000*), reservation services (p=0.000*), food and beverage (p=0.000*) and lastly financial value (p=0.000*) had significant relationship to customer satisfaction. The results of this study consistent with findings of Chou, Lu and Chang (2014) where they investigated the effect of Service Quality on Customer Satisfaction in high-speed rail services in Taiwan. The results indicated that Service Quality has a positive effect on Customer Satisfaction. In other words, the passengers of HSR service who have received high service quality will possibly be more satisfied. Besides, the past research by Lien and Kao (2008) on the effects of service quality dimensions (functional quality; technical quality) on Customer Satisfaction across different service types such as utilitarian and hedonic has revealed that at different services categories have a different effect on customer satisfaction. More specifically, in the banking sectors which considered as utilitarian service has resulted that technical quality (beta=0.59) has a stronger effect on customer satisfaction that functional quality (beta=0.18). While in the hedonic services functional quality (beta=0.40) has more effect on customer satisfaction than technical quality (beta=0.39). However, we have also tested the moderation analysis between Service Quality and Customer Satisfaction. Respectively, it reveals that there is no moderating effect of Attractiveness of Alternatives on the link between Service Quality and Customer Satisfaction (t=0.4964, p=0.6206). The fifth objective was not achieved and Ho3 was accepted. The findings are inconsistent with past studies. According to a previously mentioned study by Lien and Kao (2008), the moderation effect of Attractiveness of Alternatives was also tested. Hence, it resulted that Attractiveness of Alternatives has a strong effect on the link between Service Quality dimensions and Customer Satisfaction.

Secondly, the findings of this research shows that is a moderate correlation between Perceived Value and Customer Satisfaction (rs=0.443, p=0.000). Respectively, the result of regression analysis reveals that there is a positive relationship between Perceived Value and Customer Satisfaction (t=4.8107, p=0.0000). Similarly, we may conclude that Perceived Value has the positive effect on Customer Satisfaction. Thus, the second and fourth objective was achieved, Ha2 and Ha4 were supported. Further confirmation of the result of Perceived Value is illustrated by the work of Wong and Fong (2010). These researchers found that perceived value plays an important role in order to increase the level of customer satisfaction in the gaming industry. Furthermore, finding of this study supports Wu (2013; 2014) who pointed out that the perceived value positively affect customer satisfaction in Taiwan Quick Service restaurant industry and gaming industry (b=0.177, p<0.01; 2013) (b=0.721, p<0.01; 2014). As has been previously noted that the moderation analysis was conducted. The results revealed that there is no moderation effect of Attractiveness of Alternatives on the link between Perceived Value and Customer Satisfaction (t=0.4338, p=0.6653). In like a manner, the objective six was not achieved and Ho6 was accepted. There is lack of study supporting my proposed arguments due to uniqueness of this relationship.

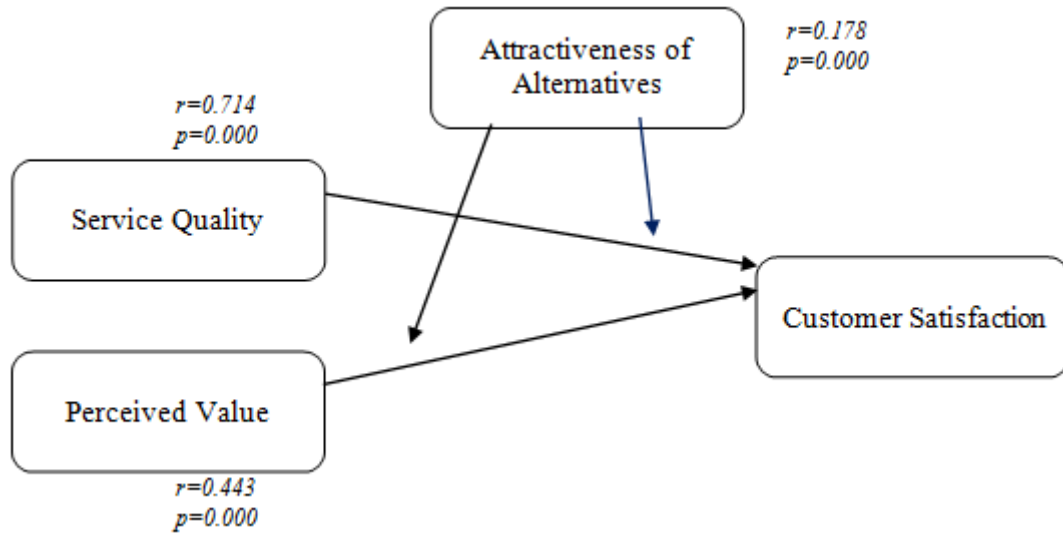## V. CONCLUSION AND DISCUSSION

Figure 2: Research Model (with r and p values)

To investigate the relationship between variables, multiple regression analysis has been applied. The model templates were important to include in this research as it has illustrated that we have tested whether Attractiveness of Alternatives exercises the moderating effect between Service Quality; Perceived Value and Customer Satisfaction. We also testify the significance of the variables; hence, it has pointed out that both are significant. Based on the multiple regression analysis conducted, the findings indicate that there is a strong positive relationship between Service Quality and Customer Satisfaction. Moreover, we have also tested through regression analysis the relationship between Perceived Value and Customer Satisfaction and the significance of the Perceived Value. As we expected, the Perceived Value has positive relationship towards Customer Satisfaction and it is significant. In addition, the moderator was found that the interaction of both variables with Attractiveness of alternatives has no effect to improve or enhance the satisfaction. Also, the significance results have pointed out that it is not significant.

There might be several explanations why moderation effect of Attractiveness of Alternatives has not been supported in the link between Service Quality, Perceived Value and Customer Satisfaction. As it was discussed in the problem statement that mobile network operators are facing problems with OTT (Over-the-Top) where customers tend to text messages through internet mobile application such as Viber, Whatsapp and so on. Particularly, Generation Y who uses WiFi to communicate with others instead of using unlimited mobile internet packages or other benefits of existing mobile carriers became another challenge for mobile network providers.

According to data collected, the majority of respondents are in the age group between 18 years and below (55.5%), while 40.9% of respondents are between 19 to 25 years. Therefore, we may consider that most of the respondents are in Generation-Y group who currently the largest group of people using the internet. The main reason could be that currently, Generation-Y tends to communicate with others

not only through mobile operators but also through open and free WiFi networks (Meyer, 2016) (Fallon, 2014). According to World Economic Forum (WEF), the mobile calls through telecom operators have sharply declined due to massive use of internet calls through WiFi providers. Namely, mobile operators are losing pricing wars with non-traditional operators. Also, WEF reported that in some regions WiFi is using as a main source of communication, cellular was used only in some rare cases (Heinz, 2016). Indeed Generation-Y is rarely using their smartphones to make the call and only uses them to be in touch with their parents (Sarazin, 2016). As the most respondents are in Generation-Y group who may say that they do not attempt to search information of price, packages and ask from their friends about the quality of alternative mobile telecom providers. It is because of they are addicted to the internet, especially in Malaysia. According to The Star, the internet usage of Malaysian youth is increasing rapidly (Cheng, 2016).

In sum, we may conclude that Generation-Y is mainly not interested in Mobile Telecom provider or do not concern who is the Mobile Network operator and products offer as long as they provide the internet for what they pay. Despite many products offered with low price and high-quality services they provide by mobile network providers, organizations are not able to compete with free and open WiFi. It is because of that currently in Malaysia there are no public places without WiFi. Consequently, existing carrier and alternatives are the inability to affect customers (Generation Y) with their price war, improving service quality, delivering value and so on. Hence, there is no moderation effect between Service Quality, Perceived Value and Customer Satisfaction in Mobile Telecom Industry in Malaysia.

REFERENCES

1. Anderson, E. W., Fornell, C. and Lehmann, D. R. (1994). "Customer Satisfaction, Market Share, And Profitability: Findings From Sweden". The Journal of Marketing, 58(3), pp.53-66.
2. Barnhoom, C., (2006). "Customer satisfaction increases in the Telecommunications industry". Synovate Research Reinvented.
3. Chen A. H., et. al (2011). "The Causes of Customer Satisfaction in Telecommunication Services: An Empirical Study". Proceedings of the 7th International Conference on Advanced Information Management and Service.
4. Chen A., Lu, Y. Gupta, S. and Xiaolin, Q. (2014). "Can Customer Satisfaction And Dissatisfaction Coexist? An Issue of Telecommunication Service in China". Journal of Information Technology, 29(3), pp.237-52.
5. Cheng, N., (2016). "Internet Addiction on the Rise Among Malaysian Youths". [Online] Available at: http://www.thestar.com.my/news/nation/2016/10/07/internet-addiction-on-the-rise-among-malaysian-youths-enough-evidence-to-show-links-to-anxiety-decre/ [Accessed 21 August 2017].
6. Chou, P. F., Lu, Ch. Sh. And Chang Y. U. (2014). "Effects of Service Quality and Customer Satisfaction on Customer Loyalty in HIgh Speed Rail Services in Taiwan". Transportmetrica A: Transport Science, 10(10), pp.917-845.
7. Dr. Fellegi, I.P. (2003). "Survey Methods and Practices". Statistic Canada.
8. Fallon, N., (2014). "Marketing to Millenials: How to Capture Gen Y Consumers". [Online] Available at: http://www.businessnewsdaily.com/6602-selling-to-generation-y.html [Accessed 21 August 2017].
9. Ghasemi, A.and Zahediasl, S. (2012). "Normality Test for Statistical Analysis: A Guide for Non-Statisticans". International Journal of Endocrinol Metab. , 10(2), pp.486-89.
10. Hogan, J. E., Lemon, K. N. and Libai, B. (2003). "What is the true value of a lost customer?" Journal of Service Research, 5(3), pp.196-208.
11. Jones, C. (2016). "Advantages & disadvantages of qualitative & quantitative research". [Online] Available at: http://www.ehow.co.uk/info_8091178_advantages-disadvantages-qualitative-quantitative-research.html [Accessed 26 August 2016].
12. Khan, Sh. and Afsheen, S. (2012). "Determinants of Customer Satisfaction in Telecom Industry; A Study of Telecom Industry Peshawar KPK Pakistan". Journal of Basic and Applied Scientific Research , 12(2), pp.12833-40.
13. Langley, C. J. and Holcomb, M. C. (1992). "Creating logistics customer value". Journal of Business Logistics, 13(2), pp.1-1.
14. Lien, N. and Kao, S. (2008). "The Effects of Service Quality Dimensions on Customer Satisfaction ACRoss Different Service Types: Alternative Differentiation As a Moderator". NA - Advances in Consumer Research, 35, pp.522-26.
15. Malaysia Communications and Multimedia Commission, (2013). "Statistical Brief Number Fourteen-Hand Phone Users Seurvey-2013". Statistical Report. Cyberjaya: Malaysia Communications and Multimedia Commission.
16. McDougall, G.H.G. and Levesque, T. (2000). "Customer Satisfaction With Services: Putting Perceived Value Into The Equation". Journal of Services Marketing, 14(5), p.394.
17. McDougall, G.H.G. and Levesque, T. (2000). "Customer Satisfaction with Services: Putting Perceived Value into the Equation". Journal of Services Marketing, 14(5), pp.392-410.
18. Meyer, K. (2016). "Millennials as Digital Natives: Myths and Realities". [Online] Available at: https://www.nngroup.com/articles/millennials-digital-natives/ [Accessed 21 August 2017].
19. Mosahab, R., Mahamad, O. and Rmayah, T. (2010). "Service Quality, Customer Satisfaction and Loyalty: A Test of Mediation". International Business Research, 3(4), pp.72-80.
20. Ping, R. A. Jr. (1993). "The Effect of Satisfaction and Structural Constraints on Retailers Exiting, Voice, Loyalty, Opportunism and Neglect". Journal of Retailing , 69(3), pp.321-49.
21. Rahman, M., et al. (2011). "Effect of Delonix Regia Leaf Extract on Glucose Tolerance in Glucoseinduced Hyperglycemic Mice". African Journal of Tradit Complement Altern Med. , 8(1), pp.34-36.
22. Ravald, A. and Gronroos, C. (1996). "The value concept and relationship marketing". European Journal of Marketing, 30(2), pp.19-30.
23. Sahadev, S. and Edward, M. (2011). "Role of Switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage". Asia Pacific Journal of Marketing and Logistics, 23(3), pp.327-45.
24. Sarazin, L. (2016). "Examining Today's Customer (and Going Beyond the Call Center)". [Online] Available at: http://mitel.co.uk/blog/cc/examining-todays-customer-and-going-beyond-call-center [Accessed 21 August 2017].
25. Sendecka, L. and Nysveen, H. (2006). "Adoption of Mobile Services Moderating Effects of Service's Information Intensity". Markedsføring og konkurranse.
26. Sidhu, B. K. (2012). Free messaging threat limited? [Online] Available at: http://www.thestar.com.my/business/business-news/2012/03/10/free-messaging-threat-limited/ [Accessed 15 April 2017].
27. Telekom Malaysia Berhad, (2000). "Annual Report 2000". annual report. Telekom Malaysia.
28. Turel, O. and Serenko, A. (2006). "Satisfaction with mobile services in Canada: An empirical investigation". Telecommunications Policy, 30(5-6), pp.314-31.
29. Upadhyay, H. (2016). "Mobile operators in Malaysia must address consumer dissatisfaction in a highly competitive market". Knowledge Centre, 2016 July. pp.1-2.
30. Wells, W. and Prensky, D. (1996). "Consumer Behavior". New York, U.S.A.: John Wiley and Sons.
31. Wong, I.A. and Fong, V. H. I. (2010). "Examining Casino Service Quality in the Asian Las Vegas an Alternative Approach". Journal of Hospitality & Management, 19(8), pp.842-65.
32. Wu, H.C. (2013). "An Emperical Study of the Effects of Service Quality, Perceived Value, Corporate Image, and Customer Satisfaction on Behavioral Intentions in the Taiwan Quick Service Restaurant Industry". Journal of Quality Assurance in Hospitality & Tourism , 14(4), pp.364-90.
33. Wu, H.C. (2014). "The Effects of Customer Satisfaction, Perceived Value, Corporate Image and Service Quality on Behavioral Intentions in Gaming Establishments". Asia Pacific Journal of Marketing and Logistics, 26(4), pp.540-65.
34. Yen, Y.X. and Horng, D. J. (2010). "Effects of satisfaction, trust and alternative attractiveness on switching intentions in industrial customers". International Journal of Management and Enterprise Development, 8(1), pp.82-101.

APPENDICIES

APPENDIX 1

Questionnaire

VARIABLES	LIST OF ITEM	SOURCES
CUSTOMER SATISFACTION	- I'm satisfied with the service quality of my mobile operator - I have been explained in detail by mobile provideers about the product and serices I purchased - The product of mobile operator that I purchase possess high quality of network - The mobile operator website is helpful and informative - My mobile operator informs me of new and improved packages - I would recommend my mobile operator to others	(Khan, 2012)
SERVICE QUALITY	- The service providers call quality/clarity is very good - This service providers network service performance (felt by the ease in getting and making) is very good - I can rely on this service provider for getting good service - This service provider has a very good network coverage - Provided packages are well structured to fulfill customer needs	Edward And Sahadev (2011)
PERCEIVED VALUE	- Comparing what i pay to the service I receive I think my service provider provides me good value - This providers service is a better value for money - The provider charges a reasonable proce for the service they provide	(McDougall, 2000)
ATTRACTIVNESS OF ALTERNATIVES	- All in all, another mobile adviser would be less costly that the present adviser is - A new mobile adviser would provide a full range of services and products - A new adviser would benefit me more than my current adviser in achieving my goals - I would feel more satisfied with the services of a new adviser that i am with my current adviser	(Ping, 1993)

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