

The Effects of Broadband Service Quality on User's Value And Loyalty: A Study on Foreign Customers In Malaysia

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Abstract: Broadband internet service is highly emerged business line in the slow-cycle competitive market and most of companies are trying to get sustainable market share through grabbing foreign customers' loyalty & increasing customers' value. The statistical analysis shows significant relationship between broadband service quality and customer value as well as significant relationship between broadband service quality and customer loyalty. In this study, the SQ model (ten dimensions) is used to measure broadband service quality but each dimension does not have equal significant level and even few of them did not have significant relationship at all. This study also discloses that competence is implicitly changed customer loyalty and customer value. Clearly, service organization should have sufficient related knowledgeable and experienced employees to maintain and provide quality service so that customers can get desired value which may increase the level of satisfaction that causes increased customer loyalty. Customer loyalty & value can be changed by gender and using experiences. However, research factors such as time scarcity, small sample size are recognized as limitations of this study but the overall theme would help managers of service industry regarding industry expansion decision or strategic planning or integration policy making to push up sustainable growth in future.

Keywords: Broadband, Customer loyalty, Customer value, SQ model, Competitive market.

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I. Introduction

In 1995, there were only twenty thousand internet users in Malaysia (MIMOS & Beta, 1995). Currently the number of internet users in this country is more than 25.3 million. However, Telekom Malaysia Berhad (TM) is established in 1946 and the largest internet service provider or other word, telecommunication company in Malaysia. TM has introduced UniFi broadband (4G), which is first-high speed broadband internet service in Malaysia and this is also widely acknowledged as one of the high-speed broadband internet service with lowest service charge around the world. TM has been grabbed majority market share of broadband internet service, which is more or less 83.96% of total market share. At present TM has collaborated with NTT Communication Corporation, Asia Submarine Cable Express (ASE), MIMOS, Cisco, Akamai Technology, UEM Sunrise, Iskandar Investment Berhad and PCCW Global to develop the internet coverage and services smoothly. In Malaysia, the main internet service is divided into two different categories, namely internet service for Civil and internet service for General/Commercial. This country is considered as world's third largest internet user zone in the world, where every single task of daily life can complete through virtually such as online shopping, online lifestyle, online office desk, online study or e-learning system and so on. The UniFi broadband service is enhanced total internet service for every user because it provides triple way services together stately internet, IPTV service and voice.

II. Literature Review

This chapter shows confab about ten independent variables namely competence, courtesy, credibility, security, access, communication, tangibility, reliability, responsiveness and understanding and two dependent variables stately customer value and customer loyalty. Here it describes that how broadband service quality influences customer value and customer loyalty in the long-term competitive market with local & foreign customers in the same market. Furthermore, researcher also explains about the expectations of foreign internet subscribers and the current benefits for local & foreign internet users by TM in Malaysia. Researcher of the

study assumes that there is a positive relationship between service quality and customer value and customer loyalty, whole discussion of this chapter contains the same assumption.

Broadband service quality

Every customer in both service and manufacturing industry wants desire quality, which means good service quality or good product quality. Parasuraman, Zeithaml and Berry (1985), in one paper, regardless of the type of service customers normally measure the quality of service by using their same opinion or principles. In another study Parasuraman, Zeithaml and Berry, (1990) are presented that customer opinion regarding service quality result or judgement relies on the experiences from earlier service and also receiving services, which may create real or actual service quality result in their mind. In nature product is a tangible thing but service is intangible thing.

Broadband service quality model

Many service quality models or scales have been introduced by different researchers till today but not all is acknowledged widely. In 1977, Parasuraman et al, has developed a service quality model with ten dimensions, which is introduced to measure customer's perception regarding service but this model has further developed by Parasuraman et al. in 1985. This model later has converted into five dimensional SQ model.

In this study however, researcher is used ten dimensional service quality model (Parasuraman et al., 1985) to measure the broadband service quality of TM. This model suggests ten different scale of dimensions for service quality namely competence, courtesy, credibility, security, access, communication, tangibility, reliability, responsiveness and understanding (Parasuraman et al., 1985). This model allows focusing a service based on customer perspective that is sufficient to measure present status of service quality to make future decisions. It is several times proved that if marketer does not take necessary actions to medicate current shortcomings then organization will have to face loss of potential market share.

Researcher of this study has used this model to evaluate the broadband service quality of TM to state out the current foreign customer market share considered user vale and user loyalty in Malaysia. Using the ten dimensional service quality models (Parasuraman et al., 1985), it could be enhanced to find and brief out broadband service quality of TM specifically. Furthermore, this model has ten diversified dimensions allow measuring service type and nature perfectly based on quantitative research method. The following model is used in this study.

1. Competence

Competence means the ability of related technical expertise or supporting knowledge of service medium or service provider (Parasuraman et al., 1985). Normally service provider should have required knowledge and experiences to serve the customer or providing error free service to maintain the quality of service that they provides. It may clear through this example that ABW provides computer hardware and software services, which reason this company must have to recruit employees who have CSE, CHE degree and sufficient experience or knowledge on those fields otherwise this organization definitely does not provide excellent service at all.

2. Courtesy

Courtesy actually clarifies about the attitude and manner of service medium or service providing organization (Parasuraman et al., 1985). It could be said that courtesy implicitly measure the attitude of service provider and also the manner of employees who are providing services to the customer. If employees of an organization do not have friendly or polite manner it could be tough to provide service that increases customer value. It cannot expect that unfriendly person can provide and maintain friendly service environment naturally.

3. Credibility

Credibility clarifies about trustworthiness means that the way service provider delivers services (promised services and actual services) to the customers (Parasuraman et al., 1985). It should state hare actual services should be always as same as promised services. Promised service means providing pre service information or service details whereas actual service means service received by customer. Therefore if the actual service does not as like as information provides before would be decreased customer value and reduce customer loyalty in the long-term basis.

4. Security

The fourth dimension of ten dimensional service quality model is security that means the privacy of customer's information and physical safety of customer, which are enhanced by the service provider (Parasuraman et al., 1985). TM provides wireless set-top boxes along with one telephone set, adopters and

charger-cables to install the broadband line inside the user area (TM, 2015). Therefore it is necessary to ensure that those things are in safe mode and even enough secured coverage to avoid any electric-contact.

5. Access

Access means service provider should have easy access online and off-line services so that customers easily reach service providers (Parasuraman et al., 1985). This facility, service provider can provide by geographically, meaning if a service organization has multiple service centers in different areas in a region then customer can get them easily. Another option for easy access is online or phone call services. If a service provider has enough supporting option through online then customers also access service provider easily.

6. Communication

According to ten dimensional service quality model, communication means the way of information clarity between service provider and customer (Parasuraman et al., 1985). Service provider should provide clear information so that customers get well understanding before and during getting services. For example service provider should not keep any hidden terms and condition or deduct facilities without informing customers. If it happens then customer value will be decreased and causally reduce also customer loyalty. That is why it's better to give out all service information to customer before executing actual services.

7. Tangibility

For instance, in the context of Telecommunication Malaysia, tangibility frame out through delivering excellent broadband installment services, well equipped service centers, smart boxes for wireless broadband service etc. For this research, the researcher has chosen the proposed service quality framework (ten dimensional SQ model) of Parasuraman et al (1985). Ziethaml&Bitner (2003) defined tangibles as physical appearance of facilities, personnel, communication materials, equipment's etc. They further explained that service companies generally use this dimension for increasing their image, signaling quality to a customer and/or providing continuity.

8. Reliability

According to the service quality model (ten dimensions), reliability means providing service to customer reliably and accurately (Parasuraman et al., 1985). This dimension also clarifies that service provider should be helpful and care to customers to increase customer value and loyalty. Normally any service provider may provide a same service that is why service provider should enhance same level of service delivery considered the value of service paid by customers. As confirmed by Ziethaml&Bitner (2003) customers might expect to re-do the business with such organizations, who repute themselves for keeping their promise.

9. Responsiveness

Responsiveness is one of the core dimensions of ten dimensional SQ model(Parasuraman et al., 1985). It refers providing services to customers timely and also describes the willingness of the service providers during service delivery to the customers. Service provider should enhance service delivery within promised period or providing service information willingly whenever customer needs or requires it. If such thing happens then service organization might have enough positive customer feedback regarding service satisfaction that may rise up customer value and loyalty.

10. Understanding

The term of understanding describes about the ability of service provider to realize customer needs clearly (Parasuraman et al., 1985). Service provider should put concentration to understand customer needs to provide better service to them. If service provider could not able to get such ability properly then outcomes would be lower and it would be great chance for competitors of this company to stand front easily. Therefore understanding is core issue for service provider to develop service quality that maintains customer value and customer loyalty.

Customer value

Decade history shows that many organizations were to decay because of lack emphasis on developing customer value. In 2001, Flint and Woodruff briefs about customer value in their paper that customer value is reasonably dissimilar than personal value of customer, which things are considered as abstract or inherent trust that changes customers behavior and incline to keep their mind same over long time. Service provider could enhance customer value through giving solid and desirable experience and knowledge which would have to attract emotionally to users or customers. Organization provides service to user or customer is as usual thing but when service comes through the way customer wants would be created or increased customer priority that might

positively improve customer value. Flint (2001) uses an example of customer value in his paper that one motor car manufacturing organization notices that most of the customers like car with Japanese motor parts. Therefore manufacturer starts using Japanese motor parts to assemble cars that dramatically increase customer's emotional feedback and trustworthy support towards this organization, meaning high successive customer value is enhanced by the motor car manufacturer. Providing or enhancing dependable and desirable service should be motto of service provider to raise customer value. Sustainable customer value means service provider delivers continuously same satisfactory service or products to target customer for example, internet service provider, cable service provider, cooking oil producer etc. therefore value created by the organization would positively change customer perceptions.

Another researcher namely Dumond (2000) also adds same assumption as like as stated Flint explains in his paper, he therefore describes that product or service with appropriate value would be enough to satisfy target users or customers properly for long term basis. Supporting the statement of Dumond it could clarify that product or service should provide or offer with customer value maintaining way, definitely not other way, which only presents simply product or service consumption. Dumond further discusses about value of customer that use or consumption of product or service offered by manufacturer or service provider is linked implicitly to customer value.

Customer loyalty

Customer loyalty is immeasurable worth for service provider or manufacturer or producer to sustain in hyper or competitive long term market. Generally customer loyalty means doing same repurchase behavior of consumer at the same brand again and again. Like many other researchers, Kumar and Shah (2004) describes that loyalty is mainly two different types namely attitudinal customer loyalty and behavioral customer loyalty. Attitudinal customer loyalty means calculative evaluation of consumer or user with strong desire and reasonable benefits that helps to precede repetitive buying mode of user or customer at the same brand or service or product. Many researchers say that customer loyalty is the ultimate outcome of satisfied customers towards specific brand (service or product), which could measure in several ways. Oliver (1997) describes about customer loyalty that loyalty comes as genuinely created commitment of consumer or user regarding purchase or patronizing again & again desire service or product continuously in the long term basis although special features and marketing of same product or service could be potential that cause consumer or user might switch to another brand. Literature presents that behavioral loyalty denotes customer's repeat buying intention of same service or product getting from same source of supplier.

III. Methodology of The Study

As first procedure, collected primary data is saved into excel database that later transferred into SPSS database accurately. As second step, data is arranged following categories (control variables, independent variables and dependent variables). In third step, three different types of statistical analyses have been done to make hypothetical decisions. These statistical analyses are reliability analysis, correlation analysis and regression analysis. Reliability analysis is done by following 'CronbachAlpha' method. Correlation analysis is done to show correlation between independent variables and dependent variables. Regression analysis is included Model analysis, Anova model analysis and regression coefficient analysis. After completing those statistical analyses, findings and hypothetical decisions are made based on statistical results and then findings discussion and conclusion have done to complete research goal.

Population and sample of study

It is clear that why every researcher stands on desire or selected sample size, which helps to evaluate and drawing out actual picture of target population or whole population easily. Anyways, Krejcie and Morgan have developed a sample size table, which describes that what sample size should require depends on size of target population or size of the study population. According to the Krejcie and Morgan sample size table, sample size of this study should be one hundred and eight (108) that means 108 (sample size) is required for 150 target population. Researcher of the study has chosen random sampling, which is one widely used sampling method under probability sampling. This method allows to attain respondent randomly basis during the survey. Therefore this method would have flexibility for surveyor to do survey and sample arrangement without facing any structural barriers.

Research hypothesis

In this study, it assumes that broadband service quality has positively influenced user/customer value and user/customer loyalty. Therefore it is denoted that every independent variable would have significant relationship with dependent variable. Here, service quality model (ten dimensions) is used to measure broadband service quality of TM, which model is introduced by Parasuraman et al., 1985. This model suggests

ten different dimensions namely competence, courtesy, credibility, security, access, communication, tangibility, reliability, responsiveness and understanding are considered as independent variables while customer value and customer loyalty. Researcher has developed the following hypothesis.

- There is a significant relationship between competence and customer value.
- There is a significant relationship between courtesy and customer value.
- There is a significant relationship between credibility and customer value.
- There is a significant relationship between security and customer value.
- There is a significant relationship between access and customer value.
- There is a significant relationship between communication and customer value.
- There is a significant relationship between tangibility and customer value.
- There is a significant relationship between reliability and customer value.
- There is a significant relationship between responsiveness and customer value.
- There is a significant relationship between understanding and customer value.
- There is a significant relationship between competence and customer loyalty.
- There is a significant relationship between courtesy and customer loyalty.
- There is a significant relationship between credibility and customer loyalty.
- There is a significant relationship between security and customer loyalty.
- There is a significant relationship between access and customer loyalty.
- There is a significant relationship between communication and customer loyalty.
- There is a significant relationship between tangibility and customer loyalty.
- There is a significant relationship between reliability and customer loyalty.
- There is a significant relationship between responsiveness and customer loyalty.
- There is a significant relationship between understanding and customer loyalty.

Variable measurement

Independent variable

In this research, service quality model (ten dimensions) of Parasuraman et al (1985) is used to measure broadband service quality of TM. As a result the number of independent variables is raised to ten (competence, courtesy, credibility, security, access, communication, tangibility, reliability, responsiveness and understanding). Anyways, total twenty five items are used for independent variables in the questionnaire, which are measured by using five point Likert scale (Strongly Disagreed, Disagreed, Neutral, Agreed, Strongly Agreed). First three items (TM provides broadband services efficiently, Employees who are appointed for cable services have sufficient knowledge on broadband services and When I call TM service center they are able to obtain the information I need.) are used for competence.

Likewise, another three items (Broadband service operators of TM are consistently polite when answering my calls, Broadband field technicians of TM are enough friendly and Broadband service attendants of TM have pleasant demeanor.), two items (The UniFi of TM has good reputation for excellent broadband service and Actual service of TM is always as same as promised service of TM.), three items (Wireless set-top boxes (UniFi boxes) are safe for me to use in my house, My broadband line is protected against unauthorized use and TM keeps user information in confidential.) are used for courtesy, credibility, security respectively. Similarly, three items (TM has a 24-hours toll-free phone number, I can talk to broadband service center of TM when I need and I can easily access TM broadband service center through online), two items (Employees of TM provide enough information regarding broadband service and Employees of TM listen patiently customer's problem), another three items (TM provides modern set-top boxes with broadband connection, TM has highly user friendly web portal and I get 7/24 online customer care services easily) are used for access, communication, tangibility respectively. Finally, two items (When you have a problem, TM shows sincere interest to solve it and TM performs the service right the first time), two items (Employees of TM are always willing to help customers and TM provides fast and efficient customer care services) and two items (Employees of TM understand customer needs and TM provides customer priority broadband service) are used for reliability, responsiveness and understanding respectively.

Dependent variable

In this study, customer value and customer loyalty are used as dependent variables. However, total seven items are used for dependent variables in the questionnaire, which are measured by using five point Likert scale (Strongly Disagreed, Disagreed, Neutral, Agreed, Strongly Agreed). Question one to three, meaning three items (I have been truly enjoying TM broadband service, TM enhances customer value perfectly and TM really cares about the customers facility) are used for user value. On the other hand, four items (I would positively recommend TM broadband to someone who seeks my advice, I am willing to put in extra effort to get TM

broadband service, The overall quality of broadband services provided by TM is excellent and I expect to stay with TM broadband service for a long period of time) are used for user loyalty.

Control variable

There are total six variables used as control variables in the questionnaire. Control variables are gender (Male and female), age (open ended question), nationality (open ended question), profession (student, employed and self-employed), monthly income (open ended question), experience (How long have you been using TM broadband?).

IV. Results

The descriptive statistics and correlation table (1) shows that there is a significant & positive correlation between independent variables and dependent variables but not each IV is equally correlated with dependent variables. Considered control variables, one of the control variables namely using experiences has significant correlations with CV and CL, which are significant at the 0.226* level and 0.281** level respectively. Likewise control variable namely nationality has correlation with CV and CL, which are significant at the -.199* level and -.205* level respectively but rest of the control variables have not any significant correlation with dependent variables. Again look back to table (1) the correlation between IVs and DVs, exact summary could state like that each independent variable has significant correlation with both dependent variables (customer value and customer loyalty). First IV namely competence has significant correlation with CV and CL, which are significant at the 0.871** level and 0.791** level respectively.

Similarly, courtesy has significant correlation with CV and CL, which are significant at the 0.755** level and 0.673** level respectively. Credibility, the third IV has also significant correlation with both CV and CL, which are significant at the 0.957** level and 0.858** level respectively. Furthermore, the fourth independent variable namely security has a significant correlation with both dependent variables namely CV and CL, which are significant at the 0.753** level and 0.696** level respectively. Access, the fifth independent variable has significant correlation with both CV and CL, which are significant at the 0.728** level and 0.689** level respectively. Communication, the sixth independent variable has also significant correlation with both CV and CL, which are significant at the 0.736** level and 0.656** level respectively.

| Variables | Gender | Age | Nationality | Profession | Income | Using experiences | Competence | Courtesy | Credibility | Security | Access | Communication | Tangibility | Reliability | Responsiveness | Understanding | Customer Value | Customer Loyalty |
|-----------|--------|-------|-------------|------------|----------|-------------------|------------|----------|-------------|----------|---------|---------------|-------------|-------------|----------------|---------------|----------------|------------------|
| Mean | 1.28 | 28.70 | 6.56 | 1.54 | 2621.50 | 21.99 | 4.14 | 4.15 | 3.94 | 4.48 | 4.46 | 4.47 | 3.86 | 3.92 | 4.12 | 3.99 | 3.87 | 3.72 |
| Std. Dev. | .450 | 2.317 | 4.408 | .647 | 2814.384 | 13.081 | .931 | .816 | 1.243 | .809 | .861 | .954 | 1.076 | 1.179 | .877 | 1.029 | 1.15 | .982 |
| 1 | 1 | -.001 | -.182 | .253** | .188 | -.120 | -.147 | -.139 | -.154 | -.255** | -.279** | -.221* | -.124 | -.247* | -.130 | -.274** | -.199* | -.205* |
| 2 | | 1 | -.128 | -.117 | -.141 | -.141 | -.068 | -.085 | .013 | -.024 | -.031 | -.067 | .000 | -.009 | -.036 | -.006 | -.002 | .063 |
| 3 | | | 1 | .192* | -.127 | .134 | -.159 | -.155 | -.166 | -.065 | -.053 | -.023 | -.152 | -.085 | -.059 | -.156 | -.103 | -.086 |
| 4 | | | | 1 | .655** | .320** | .017 | .049 | -.029 | -.028 | -.042 | .002 | .021 | -.014 | .046 | -.073 | -.008 | -.011 |
| 5 | | | | | 1 | .292** | .114 | .132 | .103 | .079 | .046 | .066 | .129 | .115 | .086 | .120 | .111 | .128 |
| 6 | | | | | | 1 | .095 | .145 | .153 | .195* | .207* | .157 | .186 | .295** | .202* | .268** | .226* | .281** |
| 7 | | | | | | | 1 | .906** | .857** | .815** | .787** | .843** | .852** | .774** | .827** | .684** | .871** | .791** |
| 8 | | | | | | | | 1 | .694** | .821** | .792** | .898** | .740** | .755** | .932** | .628** | .755** | .673** |
| 9 | | | | | | | | | 1 | .727** | .690** | .692** | .947** | .868** | .709** | .769** | .957** | .858** |
| 10 | | | | | | | | | | 1 | .959** | .931** | .758** | .741** | .784** | .710** | .753** | .696** |
| 11 | | | | | | | | | | | 1 | .894** | .733** | .715** | .805** | .665** | .728** | .689** |
| 12 | | | | | | | | | | | | 1 | .740** | .739** | .872** | .618** | .736** | .656** |
| 13 | | | | | | | | | | | | | 1 | .865** | .757** | .751** | .929** | .900** |
| 14 | | | | | | | | | | | | | | 1 | .784** | .768** | .957** | .865** |
| 15 | | | | | | | | | | | | | | | 1 | .616** | .773** | .690** |
| 16 | | | | | | | | | | | | | | | | 1 | .768** | .771** |
| 17 | | | | | | | | | | | | | | | | | 1 | 1 |

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

* Correlation is significant at the 0.05 level (2-tailed).

Table 1: Correlation analysis

Tangibility, the seventh independent variable has significant correlation with both CV and CL, which are significant at the 0.929** level and 0.900** level respectively. Reliability, the eighth independent variable has significant correlation with both CV and CL, which are significant at the 0.957** level and 0.865** level respectively. Responsiveness, the ninth independent variable has significant correlation with both CV and CL, which are significant at the 0.773** level and 0.690** level respectively. Understanding, the tenth and last independent variable has significant correlation with both CV and CL, which are significant at the 0.768** level and 0.771** level respectively.

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.097 | .128 | | -.758 | .451 |
| Gender | .010 | .022 | .004 | .456 | .649 |
| Age | .001 | .004 | .001 | .185 | .854 |
| Nationality | .002 | .002 | .008 | .889 | .376 |
| Profession | .003 | .020 | .002 | .154 | .878 |
| Income | .477 | .000 | .001 | .105 | .916 |
| Using experiences | .000 | .001 | .001 | .169 | .867 |
| Competence | .672 | .046 | .545 | 14.738 | .000 |
| Courtesy | -.583 | .066 | -.414 | -8.792 | .000 |
| Credibility | .145 | .034 | .157 | 4.294 | .000 |
| Security | .187 | .063 | .132 | 2.970 | .004 |
| Access | -.109 | .046 | -.082 | -2.362 | .020 |
| Communication | -.156 | .036 | -.130 | -4.299 | .000 |
| Tangibility | .017 | .027 | .016 | .627 | .532 |
| Reliability | .628 | .020 | .643 | 31.665 | .000 |
| Responsiveness | .236 | .044 | .181 | 5.413 | .000 |
| Understanding | -.043 | .015 | -.039 | -2.856 | .005 |
| a. Dependent Variable: Customer Value | | | | | |
| Table 2: Regression coefficient analysis | | | | | |

Hypothesis 1: It deals with direct & significant relationship between competence and customer value. As can be inferred from table 2, the relationship between competence and customer value is statistically significant (B = 0.672^{***}, p<0.05). Thus, hypothesis 1 is fully supported.

Hypothesis 2: It deals with direct & significant relationship between courtesy and customer value. As can be inferred from table 2, the relationship between courtesy and customer value is statistically significant (B = -0.583^{***}, p<0.05). Thus, hypothesis 2 is fully supported.

Hypothesis 3: It deals with direct & significant relationship between credibility and customer value. As can be inferred from table 2, the relationship between credibility and customer value is statistically significant (B = 0.145^{***}, p<0.05). Thus, hypothesis 3 is fully supported.

Hypothesis 4: It deals with direct & significant relationship between security and customer value. As can be inferred from table 2, the relationship between security and customer value is statistically significant (B = 0.187^{**}, p<0.05). Thus, hypothesis 4 is fully supported.

Hypothesis 5: It deals with direct & significant relationship between access and customer value. As can be inferred from table 2, the relationship between access and customer value is statistically significant (B = -0.109^{*}, p<0.05). Thus, hypothesis 5 is fully supported.

Hypothesis 6: It deals with direct & significant relationship between communication and customer value. As can be inferred from table 2, the relationship between communication and customer value is statistically significant (B = -0.156^{***}, p<0.05). Thus, hypothesis 6 is fully supported.

Hypothesis 7: It deals with direct & significant relationship between tangibility and customer value. As can be inferred from table 2, the relationship between tangibility and customer value is not statistically significant (B = 0.017, p>0.05). Thus, hypothesis 7 is rejected.

Hypothesis 8: It deals with direct & significant relationship between reliability and customer value. As can be inferred from table 2, the relationship between reliability and customer value is statistically significant (B = 0.628^{***}, p<0.05). Thus, hypothesis 8 is fully supported.

Hypothesis 9: It deals with direct & significant relationship between responsiveness and customer value. As can be inferred from table 2, the relationship between responsiveness and customer value is statistically significant (B = -0.236^{***}, p<0.05). Thus, hypothesis 9 is fully supported.

Hypothesis 10: It deals with direct & significant relationship between understanding and customer value. As can be inferred from table 2, the relationship between understanding and customer value is statistically significant (B = -0.043^{**}, p<0.05). Thus, hypothesis 10 is fully supported.

Hypothesis 11: It deals with direct & significant relationship between competence and customer loyalty. As can be inferred from table 3, the relationship between competence and customer loyalty is statistically significant ($B = 0.956^{***}$, $p < 0.05$). Thus, hypothesis 11 is fully supported.

Hypothesis 12: It deals with direct & significant relationship between courtesy and customer loyalty. As can be inferred from table 3, the relationship between courtesy and customer loyalty is statistically significant ($B = -0.887^{***}$, $p < 0.05$). Thus, hypothesis 12 is fully supported.

Hypothesis 13: It deals with direct & significant relationship between credibility and customer loyalty. As can be inferred from table 3, the relationship between credibility and customer loyalty is statistically significant ($B = -0.646^{***}$, $p < 0.05$). Thus, hypothesis 13 is fully supported.

Hypothesis 14: It deals with direct & significant relationship between security and customer loyalty. As can be inferred from table 3, the relationship between security and customer loyalty is not statistically significant ($B = 0.075$, $p > 0.05$). Thus, hypothesis 14 is rejected.

Hypothesis 15: It deals with direct & significant relationship between access and customer loyalty. As can be inferred from table 3, the relationship between access and customer loyalty is not statistically significant ($B = -0.043$, $p > 0.05$). Thus, hypothesis 15 is rejected.

Hypothesis 16: It deals with direct & significant relationship between communication and customer loyalty. As can be inferred from table 3, the relationship between communication and customer loyalty is not statistically significant ($B = -0.207$, $p > 0.05$). Thus, hypothesis 16 is rejected.

Hypothesis 17: It deals with direct & significant relationship between tangibility and customer loyalty. As can be inferred from table 3, the relationship between tangibility and customer loyalty is statistically significant ($B = 0.745^{***}$, $p < 0.05$). Thus, hypothesis 17 is fully supported.

Hypothesis 18: It deals with direct & significant relationship between reliability and customer loyalty. As can be inferred from table 3, the relationship between reliability and customer loyalty is statistically significant ($B = 0.432^{***}$, $p < 0.05$). Thus, hypothesis 18 is fully supported.

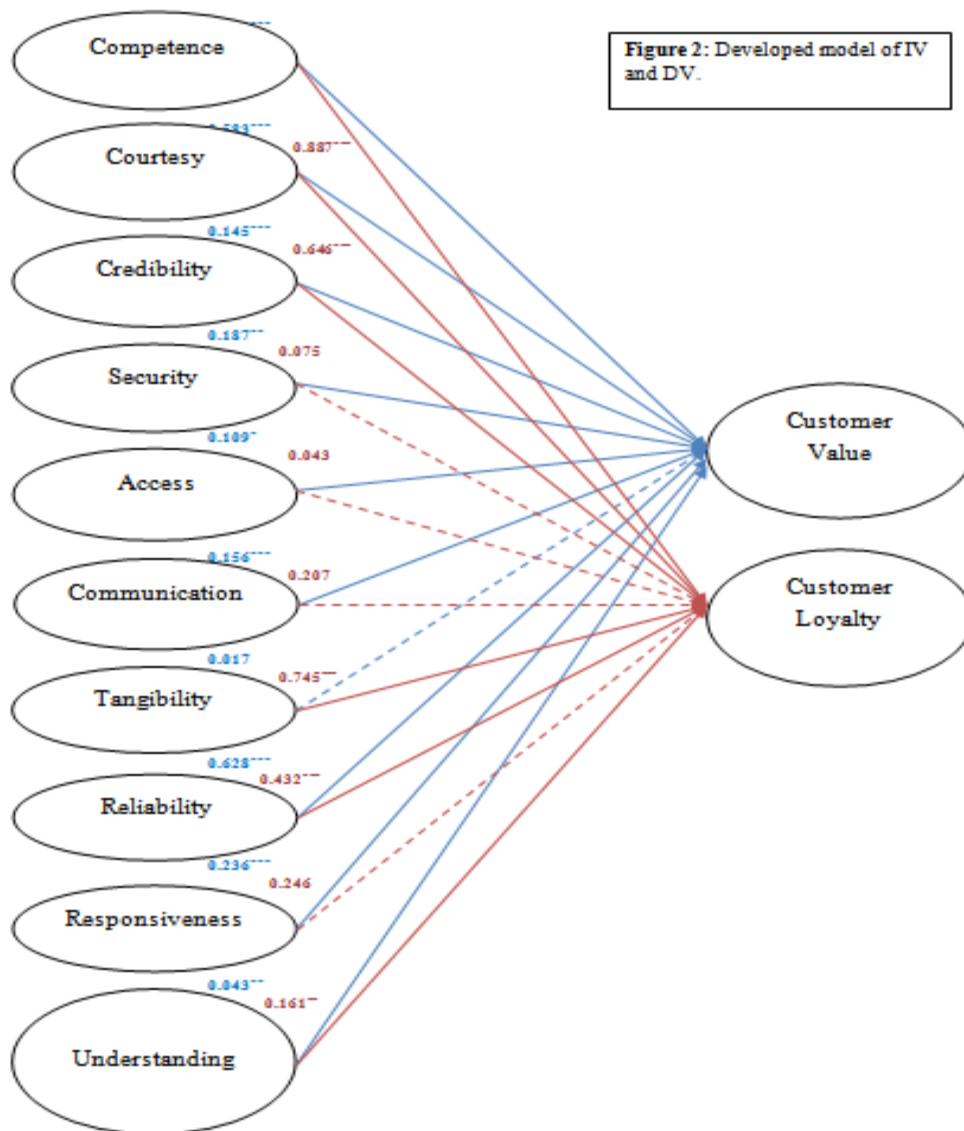
Hypothesis 19: It deals with direct & significant relationship between responsiveness and customer loyalty. As can be inferred from table 3, the relationship between responsiveness and customer loyalty is not statistically significant ($B = 0.246$, $p > 0.05$). Thus, hypothesis 19 is rejected.

Hypothesis 20: It deals with direct & significant relationship between understanding and customer loyalty. As can be inferred from table 3, the relationship between understanding and customer loyalty is statistically significant ($B = 0.161^{**}$, $p < 0.05$). Thus, hypothesis 20 is fully supported.

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.445 | .491 | | -.907 | .367 |
| Gender | -.034 | .085 | -.016 | -.403 | .688 |
| Age | .035 | .014 | .082 | 2.391 | .019 |
| Nationality | .002 | .009 | .011 | .265 | .792 |
| Profession | -.097 | .075 | -.064 | -1.288 | .201 |
| Income | .605 | .000 | .048 | 1.024 | .309 |
| Using experiences | .006 | .003 | .077 | 1.950 | .054 |
| Competence | .956 | .175 | .907 | 5.454 | .000 |
| Courtesy | -.887 | .255 | -.736 | -3.477 | .001 |
| Credibility | -.646 | .130 | -.818 | -4.975 | .000 |
| Security | .075 | .243 | .062 | .310 | .757 |
| Access | -.043 | .178 | -.038 | -.242 | .809 |
| Communication | -.207 | .140 | -.202 | -1.482 | .142 |
| Tangibility | .745 | .104 | .818 | 7.136 | .000 |
| Reliability | .432 | .076 | .517 | 5.664 | .000 |
| Responsiveness | .246 | .168 | .220 | 1.464 | .147 |
| Understanding | .161 | .058 | .169 | 2.752 | .007 |

a. Dependent Variable: Customer Loyalty

Table 3: Regression coefficient analysis.



V. Conclusion

Broadband service is mainly contractual and renewable semi direct-intangible service that is significantly influenced by quality of data service due to maintain customer value and customer loyalty, meaning broadband service quality has significant impact on customer value and customer loyalty. Customer value might build up through getting continuous trustworthy satisfaction of quality service that should ensure by the service provider and finally company gets a large sustainable loyal market share.

Nowadays it is probably impossible to gain large market share without maintain foreign customers especially foreigner based country like Malaysia, Thailand, France, Austria, United States of America. This is why broadband service provider must have customer priority based attention to serve both local and foreign customer together but not in single penetration market share policy, which would make sustainable balance through enhancing customer value and customer loyalty.

VI. Limitation of The Research

In this study, there are few pre-research limitations have been found by researcher. Time scarcity is one of those. This study may need to finish by short period of time that may lead to pressure on sample size of the research. It may not possible to collect large number of sample within few days which may take month or months. Therefore inadequate sample size would be another limitation of this study. No researcher can guaranty over collected information meaning that in any research there is a possibility to have a suspicion on proper data or information that provides by respondents of the study during the survey period.

Normally, broadband service is a service product in slow-cycle market. So broadband service companies expect to penetrate in both local and foreign market long term basis and their service policy is based

on contract or agreement type. Considered such matters, researcher of this study has developed some logical recommendations. Mainly promotional data service policy would help to increase market share with customer loyalty in broadband service industry. Following the horizontal integration, broadband service provider or companies should have to mobile network integration to get sustainable competitive advantage.

Maintaining forum advertising policy is really easy way to spread out the information of ongoing activities regarding customer value. Broadband service provider should have to enhance interrupt free broadband service specifically data transfer rate (uploading and downloading). Service provider should have sufficient experienced personnel to give real time on call support that would dramatically increase customer value and as well as customer loyalty. Broadband service provider should have low-paid data service for foreign customers and reduce fixed contract policy.

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