The Influence Of E-Banking Service Quality on Customer Loyalty: A Moderated Mediation Approach

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Abstract

Banks as a financial intermediary agent have a significant role in the development of the economy. The aim of the study is to examine the impact of EBSQ dimensions on the customer loyalty along with the mediation role of customer trust. The study has used primary method of data collection. A structural questionnaire has developed for 220 respondents from 5 commercial banks incorporated in Malaysia. To estimate data, SPSS software has been used. The findings imply that reliability, website design, customer service and support show statistically significant while privacy and security show negative impact on customer loyalty. While mediation role customer trust has significant impact on explaining relationship between EBSQ dimensions and customer loyalty. The study suggests a number of policy recommendations for the stakeholders.

Keyword: Banks, EBSQ dimensions, SPSS and Malaysia

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1.0 Introduction

Currently banking functions are totally online based. ATM, online money transfer, bill payment, checking statement, and so on so forth are categorized as online based services (Al-Shbiel, & Ahmad, 2016; ZEWDU, 2019). Customer used to go branch for checking their accounts statement before, but those days are no more. By sitting at home, they can browse their accounts statement. A number of tasks they can perform for example, how much deposits, how much cash out from the accounts, how to pay the bills, etc. To perform those tasks, clients do not need to go.

A customer electronically connects with a bank without interaction of human that is called electronic banking. (Jayawardhena, 2004). Although electronic banking was used for only banking service, currently it used for several purposes such as account inquiries, bank statements. download, checkbook order, bill payment, fund transfer, fixed deposit management, stock investment and insurance term payment (Tan and Teo, 2000).

Due to the electronic-banking facility, customers and banks enjoy hand sum benefits. For example, customers get customized banking services while banks able to provide those services in a cost-efficient manner (Yoon and Steege, 2013; Al-Shbiel, & Ahmad, 2016). Banks have to face several problems since many banks adapt and adopt e-banking services at the same time. Due to the increasing rate of adoption of e-banking systems, banks face stiff competition in attracting and retaining customers with their e-banking platforms. In respects to this, having competitive advantages, banks need to provide a high quality e-banking services. (Jayawardhena, 2004). By increasing service quality, bank can increase the level of loyalty towards the e-banking. (Brun et al., 2014). Consumer-expected service quality very from man to man (Parasuraman et al., 2005), and accordingly, customer perceptions and expectations of service quality can differ between physical banking and e-banking (Arcand et al., 2017).

Customer trust is the most important factors for this study. Basically, customer trust is generated from the bank services and their activities. The more service provided by the

bank, the more customer trust would be. To recall, customer trust is used as a mediating variable in explaining relationship between EBSQ dimensions and customer loyalty.

Studies showed that customer trust had been extensively used throughout the studies. Alghamdi, Elbeltagi, Elsetouhi, and Hadoud esearch illustrated that psychological traits are vital in influencing the processes of cognitive perception that, in turn, influence usage intentions. Moreover, trust has a positive impact on customers' and internet banking relationships in a long-term perspective.

Therefore, the scant research has investigated which dimensions of EBSQ influence customer loyalty. This research addresses this gap.

1.1 Research Background

Research background is the snapshot of the study. Moreover, this background implies foundation of the study. Research backgrounds include systematic analysis of the study. For example, review of the existing literature review following the research topic. The research background also includes a brief discussion of major theories and models related to the research problem.

Research background helps researchers and readers several ways namely right directions, better ideas and helping hand. **Right direction** - Doing a background check, is often the most important step in any field. This enables researchers to move in the right direction with focus and set clear goals. Readers/researchers will be aware of what has already been done in that particular area and what can be contributed to that field from your research point of view. **Better ideas** - Most of us start our research with clustered ideas and usually get stuck with how to proceed further. Having a background study in the initial phase help to declutter thoughts and get them organized. **Helping Hand** - I feel that background study becomes very useful while writing a technical paper. For most of the technical papers, the "Previous work" area is very important, and you should be familiar with at least 10 papers related to your

area. If you have already done a background study, you will be saved from this hectic task of finding reference papers for your technical paper.

Banks are the financial institutions that have a tremendous contribution to economic development. To recap, two types of services they provide namely, financial, and non-financial services. Financial services imply traditional activities such as taking deposits and providing loans. While non-traditional activities imply all types of services. Notably, both types of activities have the same importance. Nowadays no functions are performed manually rather all are online-based. Therefore, banks provide all functions through an online platform. At the same time, customers need to be aware of this. It is the most challenging task for the banks how to convince them about the online (e-banking) platform to perform banking activities. Once they were able to convince them about e-banking services, customers would be able to understand e-banking and be loyal towards the banks. Therefore, the study is towards the direction of how EBSQ dimensions affect customer's loyalty to e-banking services.

1.2 Research Rational

This is the most important part of the study. This part implies logic for the study. Why a researcher will do the analysis and what is the main rational for the study. Why the study is the most important. Specially, why the issue or topic is needed to do analysis. Therefore, a researcher should give a research rational for the study.

Furthermore, the term rationale of research means the reason for performing the research study. In this part, researcher should be able to convey why there was a need for the study to be carried out. It's an important part of the research paper that should explain how the research was novel and explain why it was significant; this helps the reader understand why the research question needed to be addressed in the research paper.

The importance of e-banking knew no bounds. Significantly, both parties such as banks and customers being benefited from the application of e-banking. Therefore, it is rational

and important to do the study on e-banking services. Whereas detailed discussions would be conducted about what factors are influential to customers being motivated and loyal to e-banking. And hence, this study analyzes several EBSQ dimensions. How those dimensions are facilitated customers to be loyal to e-banking.

1.3 Problem Statement

A problem statement is a concise description of an issue to be addressed or a condition to be improved upon. It identifies the gap between the current state and desired state of a process or product. Based on the problem statement reader can catch the idea of the research and most convenient to understand. Therefore, a problem statement bears significant importance.

E-banking is the most important tool that facilitates doing banking activities. It is said that e-banking is the most transparent and easy doing transaction. The factors motivating customers towards the e-banking services are discussed. Although there is a study on e-banking service quality (EBSQ) dimensions, there is a lacking and unclear discussion on how those dimensions influence customers ' loyal towards e-banking services. Therefore, there is a need for further discussions and hence this study is conducted to discuss the issue.

1.4 Research Objectives

The study aims to analyze EBSQ dimensions to measure customer's behavior in e-banking. Focusing on the aim following research objectives are focused.

1. To analyze reliability on customer loyalty
2. To analyze privacy and security on customer loyalty
3. To discuss website design on customer loyalty
4. To analyze customer service and support on customer loyalty
5. To discuss moderated mediation role of customer trust on customer loyalty

1.5 Research Questions

Propose research questions are given below.

1. Does reliability have a significant impact on customer loyalty?
2. Do privacy and security have a significant impact on customer loyalty?
3. Does estimate and discuss website design have a significant impact on customer loyalty?
4. Does customer service and support has a significant impact on customer loyalty?
5. Does moderated mediation role of customer trust impact customer loyalty?

1.6 Structure of the Thesis

The structure of the thesis implies the proper flow of the study. The importance of the structure of the thesis cannot be ignored. This thesis consists of V Chapters such as Chapter II states literature review, Chapter III represents research methodology, while analysis, results, and discussions are shown in Chapter IV. Last but not the least, Chapter V concludes the analysis.

2.0 Literature Review

2.0 Definitions of Key Concepts

Bank: Banks are the financial institutions that accept deposits from the public while simultaneously making loans. They provide two types of services such as financial and non-financial. Financial service implies directly related to the operations of the banks. While non-financial services imply all kinds of services i.e., wealth management, safe deposit boxes, currency exchange that has been provided by the banks. There are several types of banks namely central banks, retail and commercial banks, investment banks, agricultural banks, industrial banks, credit banks, union banks etc. The characteristics of the banks are they may be firms/individual/company, taking deposits and providing loan, service, and profit-oriented, the link between depositors and borrowers works as a third party or agent etc. (Bos, Basile, Evang, Venhuizen, & Bjerva, 2017).

E-banking: In the modern and competitive world, the term e-banking is the most familiar and important. The term implies money transfer through an electronic signal. (Yaseen, & El Qirem, 2018) implies that electronic banking is the demand of the market. Since market is competitive, they need for updated technology and innovation. Therefore, electronic banking is one kind of innovation with the help of technology. With the help of electronic banking, a customer able to do all kinds of transections.

Customer Trust: It is the level of belief that gathered after having banking services. If banks able to provide demanded services to the customer after then it helps to increase the level of trust of the customers. Customer trust is depending on the bank's management and their staff and hence there is a positive relationship between the bank's management and staff behavior and customer trust. If banks increase their services that would increase customer trust and vice-versa (Dimyati, & Subagio, 2018).

Customer Loyalty: customer loyalty is the perception of the customer. The term implies function of the human actions. Loyalty is generated after having the experience. If the customer get good experience after having something then they become positive and loyal to that things. On the other hand, when they get a negative experience after having the things then they become dissatisfied and try to move to other. In case of the banking sector, if the customer get a good services along with the innovated products, their behaviour would be the positive and become loyal towards the banks. While banks unable to provide a better service and innovated products compared to their competitor, customer's behaviors would be the negative and try to move to others. Therefore, banks should think positively to bring out innovated idea with a better service so that they get a good feedback with a better customer behaviour whereby customer become loyal to the banks.

Reliability: The word reliability represents how bankers provides services and products. Customer become faithful and positive with the bankers services. The service of the banker should more risk free and error free. Their trustworthy and positive work will bring a positive feedback and customer become reliable. This is the most important for the bankers to provide reliable work to their customers. They should be able to convince them that their work is error free and ensure that work is faithful and reliable (Shankar, & Jebarajakirthy, 2019), (Saccani et al., 2014).

Privacy and Security: This is the main crucial task of the bank. Banks are the financial institutions that are familiar to the customers as safe custody. The main task of the banks is to keep customer money at the safest and security level. Once they were able to do that, customers become loyal to banks. They believe in banking activities and stay with them. Once they were unable to ensure secure and safe conditions, they almost out of service. Nobody believes in them. When banks able to ensure the privacy and security of the customers, they become loyal to e-banking Rawwash, Masad, Enaizan., Eneizan, Adaileh, Saleh, & Almestarihi, (2020).

Website Design: Website design is one the most important way of advertising. Banks should provide up-to-date information to the customers. Therefore, the website is the most

appropriate way for providing up-to-date information. Website design is the next dimension of EBSQ. In the e-banking context, bank should update all related information to the website so that customer can get latest and updated information. Meanwhile they would be the loyal to the bank (Shankar, & Jebarajakirthy, 2019).

Customer Services and Support: Customer service and support is the next EBSQ dimension. To recall, banks are the intermediary agents for the customers. Therefore, by nature, banks services and supports are the most important dimensions. Bank's service and support would help them to be loyal. Therefore, it would be said that more services and supports provided by the banks that would help the customer to be more loyal to the banks (Rahi, Abd Ghani, & Alnaser, 2017).

Mediation Effects: The word mediation implies the third variable between exogenous and endogenous variables. Moreover, intervein the relationship between two variables. According to Barron & Kenny (1996), mediation works in three stages. Firstly, exogenous variable (X) impact on the endogenous variable (Y), secondly exogenous variable impact on the mediation (M) and finally mediation variable impact on the endogenous variables (Y) (Hayes, 2009).

For this study, customer loyalty is used as a dependent variable. To recall customer loyalty, define as behavioral outcomes of the customer. Whereas customer behaviour is largely dependent on the services and other banking activities. Moreover, more the bank service, increase the level of customer expectation, and high the customer loyalty to the banks.

2.2 Critical Review of Key Theories

2.2.1 Cognitive Motivational Relationship (CMR) theory

Cognitive Motivational Relationship (CMR) theory which is developed by Lazarus (1991). This theory is used in this study to provide theoretical support for the association between

EBSQ and customer loyalty to e-banking services. Based on the theory, it is concluded that how an individual feels after having experiences. In case of the banking sectors, we can conclude that feelings of the customers after getting services and support from the banks. Therefore, in a nutshell, how customers being loyal towards e-banking activities after having banking experiences.

2.2.2 The Expectation-Confirmation Theory

This theory posits that there is a number flow such as customer creates expectation before having the products, after having products they generate how they get utility of the products and services, they compare it before and after expectation, they develop satisfaction level, and finally, they place purchase intention (Chiguvi, & Guruwo, 2017).

According to Richard L. Oliver in 1977 and 1980, the constructions of the theory are as follows.

2.2.2.1 Expectations

The word expectations refer someone expect something. More specially, how a customer expects from the banks. What are demand of the customers? What kinds of services they want, what kinds of products they want? . A customer can feel good or bad after having the things. Meaning that feelings in post purchase.

2.2.2.2 Perceived performance

This implies that how customer get utility from the banks. Meaning that after having products and services, customer generate a level of how much they get satisfaction after having bank service and products.

2.2.2.3 Disconfirmation of beliefs

Disconfirmation of belief implies that customer reveal their opinion regarding products and services after having those from the banks. The confirmation would be the positive if they

get good perception after using the products and service. While the confirmation would the negative once they get bad perception of the products and services.

2.2.3 The Theory of Reasoned Actions

The theory of reasoned action (TRA) offers a conceptual framework that aims to explain the relationship between attitudes and behaviors within human action. It is mainly used to predict how individuals will behave based on their pre-existing attitudes and behavioral intentions (Siringoringo, 2015). To recall, the theory of Reasoned Action was developed by Martin Fishbein and Icek Ajzen as an improvement over Information Integration theory.

Specifically, Reasoned Action predicts that behavioral intent is caused by two factors: attitudes and subjective norms. Attitudes means behavior of the customers while subjective norm consists of normative belief and motivational belief.

Within the TRA framework, behavioral intention depends on attitudes and subjective norm. attitude implies the reaction of customer. Whereas this reaction depends on service and product that have been gotten by the customer from the banks. If the services and products are accordingly to the expectation of the customer then the attitudes of the customer would be positive. While the attitudes would be negative once customers get bad services and products. Moreover, attitude is the function of the customer beliefs.

On the other hand, subjective norms imply how banks approve the behaviour of the customers. Subjective norms can be measured by direct and indirect measure. Direct measure implies asking bankers regarding the social pressures while indirect measure imply observe the behaviour of the participants.

2.2.4 Self-Efficacy Theory

Bandura (1977) brought forward the self-efficacy theory (SET) based on cognitive learning theory, to explain the psychological changes undergone through different treatments. The

author has explained two major concepts such as self-expectation and evaluation of that expectation. Both are come from the psychological matter of human. The word self-expectation implies how a customer expect to have products and services. Generally, customer expected and hoped they will get good services from the bank. Based on that psychological has occurred. While outcome of the expectation meaning that how customer react to the bank. The level of reaction is depending on the level of expected services that has gotten from the banks (Igbaria and Iivari, 1995; Mun and Hwang, 2003; Hsu and Chiu, 2004; and Al-Shbiel, & Ahmad, 2016).

2.2.5 Service Quality Theory

Services represent behavioral things rather than entities. The main function of the bank is to better and better services. The more service they, the more performance would be. Therefore, the theory imply that the quality of the services should better and positive for the customer.

According to Berry et.al, (1985) which stated that conclude that consumer perceptions of service quality result from comparing expectations before receiving the service and their experience of the service. Service quality is saided to be satisfactory once customers get expected services. Service quality is saided to be less than satisfactory once services do not meet the expectation of customers. Finally, once customers get services more than their expectation level, service quality is saided to more than satisfactory.

The main guideline for the banker is to observe the behaviour of the customers. Their products and services should be provided to the customer after measuring their behaviour. Customer behaviour is the most important. What kinds of products they want, what kinds variation of products they need, what kinds of services they need, each and everything should be measured.

2.2.6 Innovation Diffusion Theory (IDT)

The world is the most competitive. To keep pace with the competitive word banker has to follow and maintain proper innovation to the products and services. Innovation must come with the market demand. And this innovation should be influential. Meaning that innovation should influence the behaviour of the customers.

Similarly, Gerrard and Cunningham (2003), the study come out with an interesting finding that is innovation should be convenient, less complex, and more compatible to the customers.

According to the study of Lau (2002), the study implies that perceived usefulness, perceived complexity, relative advantage, compatibility, and observability of innovative trading services were significantly correlated with an attitude of using the online trading system. Similarly, Gounaris and Koritos (2008) investigated the users and non-users of internet banking through the use of web survey and found that perceived characteristics of innovation provide a better understanding than the TAM and that the IDT is significantly better in predicting customers' acceptance of internet banking Al Mohaimmeed (2012).

2.3 Identification of Research Gap

Research gap is the most important part of the research. A reader easily understands whole thesis after reading the research gap. Research gap represents why a researcher do the analysis. research gap would come after reviewing literature review. Based on the literature review, it is found that there are many studies on the EBSQ dimensions but scant studies on what dimensions is the most important on explaining customer loyalty. Moreover, the study will focus on the customer trust as a mediating variable on explaining relationship between EBSQ dimensions and customer loyalty. Therefore, the focus is towards the direction.

2.4 Linking Current Research to Existing Research

There is a strong linkage between current research and existing research. As said earlier, EBSQ dimensions are studied earlier while the current study is the extensions of that to further analyses which factors of EBSQ dimensions affects customer loyalty mostly along with the mediation role of customer trust. Therefore, it is concluded that current research has a strong linkage with the existing research.

3.0 Research Methodology

3.1 Research Design

Research design is defined as a framework of methods and techniques that has applied by the researchers to solve specific research question. The chosen research techniques must be supported by the studies. By this research method, research examine the operational framework that design based on the research questions. Therefore, a research method is the most important for the study since it analyze and evaluate the research questions.

3.2 Research Method

Research method is used to evaluate the conceptual framework while conceptual framework is based on the research question and objectives (Ciklum, 2017). Research method is the most important for qualitative and quantitative study. Therefore, a researcher has to select research method appropriately that must associate with the previous studies. Therefore, this study applies SPSS software to analyze quantitative research. To analyze research, a numbers of variables are selected.

To recap, this study has 500 respondences from 5 selective commercial banks in Malaysia. The respondent's are the customers of the banks. To analyze data, this study has used SPSS software.

SPSS (Statistical Package for the social sciences) is the set of software programs that are combined in a single package. The basic application of this program is to analyze scientific data related to social science. This data can be used for market research, surveys, data mining, etc. SPSS Statistics is a software package used for logical batched and non-batched statistical analysis. This software is one of the most popular statistical packages which can perform highly complex data manipulation and analysis with simple instructions.

3.3 Procedure and Data Collection

The purpose of this study is to examine EBSQ dimensions on the customer's loyalty towards e-banking. To recall, EBSQ dimensions (i.e., customer support, privacy, website design, and reliability) used as a independent variables, customer trust used as a mediating variable and customer loyalty applied as a dependent variable. For the purpose of collecting data, primary data collection method (i.e., structural question year) is used.

3.4 Data Collection Method

This analysis will apply qualitative approaches. Therefore, primary data will be collected for this analysis. Data will be based on the structural questionnaire from the selected persons of each bank within the contest of the banking industry.

3.5 Data Collection Tools

To recap, this study applied the primary method and hence a structural questionnaire was designed and developed. A questionnaire is a research instrument consisting of a series of specific questions to gather information for specific topics from respondents. the questionnaire can be thought of as a kind of written interview. Often a research questionnaire typically mixes of both open and closed questions to collect data. Uniformity is the most important feature of a good questionnaire. It is very useful for collecting demographic information, personal opinions, facts, or attitudes from respondents. One of the most significant attributes of a research form is uniform design and standardization. Every respondence sees the same contents and same questions. Exploratory is another important feature of a good research questionnaire. It should be exploratory to collect qualitative data. An open-ended question is very good for data collection since it allows the respondent to elaborate their answers and give details explanations. It typically follows a structured flow of questions to increase the number of responses.

The questionnaire can be either a structured questionnaire or an unstructured questionnaire structured questionnaire collect quantitative data. The questionnaires are planned and designed to gather precise information. It also initiates a formal inquiry, supplements data check previously accumulated data and helps validate any prior hypothesis. On the other hand, an unstructured questionnaire collects qualitative data. They use a basic structure and some branching questions but nothing that limits the response of respondents the questions are more open-minded to collect information. There are several types of questionnaires such as online questionnaires, telephone questionnaires, in-house questionnaires and mail questionnaires.

3.7 Target Population & Sampling Methods

The expected sample size is between 500 customers from 5 commercial banks that are incorporated in Malaysia. For more accuracy, the customer will be divided in terms of age, education, income. Commercial banks in Malaysia will be selected for the study.

3.8 Data Analysis Plan

The SPSS software will be used in analyzing the data in this research using correlational analysis and regression analysis. This software will provide the researcher with the required information to meet the desired objectives. Tests will be done on designed hypothesizes. The qualitative approach will ensure the significant relationship from EBSQ dimensions towards customer loyalty on e-banking services.

4.0 Results and Discussions

4.1 Demographic analysis

The word demographic analysis can cover whole societies or groups defined by criteria such as gender, age, occupation, qualification, income, account types and bank selection criteria. (Demographicpartitions.org, 2015) usually treat demography as a field of sociology, though there are a number of independent demography departments (Johnson-Hanks, 2018).

Table 4.1 below shows the demographics of the respondents to this study. About 30% of the respondents were males and 66% were females, 23% were between 18 and 35 years old, 65% were aged of 36-45, and about 7.7% were aged of 46-60 and the remaining 3.6% in between 61 & above. Among them 13% were involved in business, 79% were involved in the job, 0.45% were a student.

Table 4.1 Demographic Analysis

Demographic Factor	Sub-factor	Frequency	Percent	Cumulative Percent	Obervation (N)
Gender	Female	67.000	30.455	30.455	220
	Male	145.000	65.909	96.364	
	Other	8.000	3.636	100.000	
Age	18-35	51.000	23.182	23.182	220
	36-45	144.000	65.455	88.636	
	46-60	17.000	7.727	96.364	
	61 & Above	8.000	3.636	100.000	
Occupation	Business	29.000	13.182	13.182	220
	Job	175.000	79.545	92.727	
	SELF EMPLOYED	1.000	0.455	93.182	
	Student	13.000	5.909	99.091	
	UNEMPLOYED	2.000	0.909	100.000	
Qualification	Graduate	149.000	67.727	67.727	220
	High School	47.000	21.364	89.091	
	Post-Graduate	24.000	10.909	100.000	
Income (Monthly)	0 to 3,000 MYR	44.000	20.000	20.000	220
	3,001 to 6,000 MYR	142.000	64.545	84.545	
	6,001 to 9,000 MYR	25.000	11.364	95.909	
	9,001 & Above	9.000	4.091	100.000	
Account Type	Business	17.000	7.727	7.727	220

	Current	25.000	11.364	19.091	
	Savings	178.000	80.909	100.000	
Bank selection criteria	All - convenience, service quality, availability of Atm	1.000	0.455	0.455	220
	Availability of ATM	28.000	12.727	13.182	
	Convenience	32.000	14.545	27.727	
	Service Quality	159.000	72.273	100.000	

4.2 Data Cleaning and Preparation

It is the most important for the researcher to clean and prepare data before running it. This is the pre-steps of the researcher before running data. After preparing data, I mean remove all outliers from the data and make one final set. Researcher has to remove the outliers those are stay far from the mean. We see two pictures below namely before removing outlier and after outlier. In the picture of before removing outlier, it is observed that there are so many values that stay far from the mean. Therefore, researcher has to remove those values to make the data cleaned and ready to run. In picture of after outlier, we see all values stay closer to the mean and data is cleaned and ready to run.

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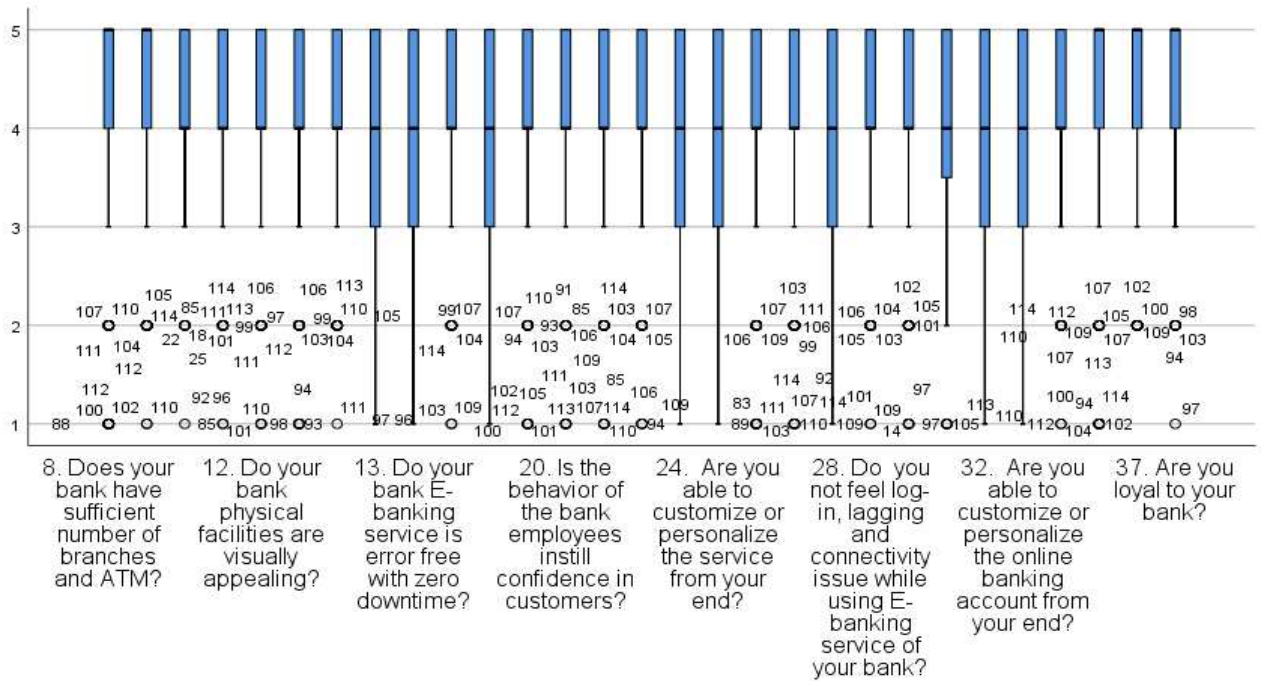
Before removing outlier
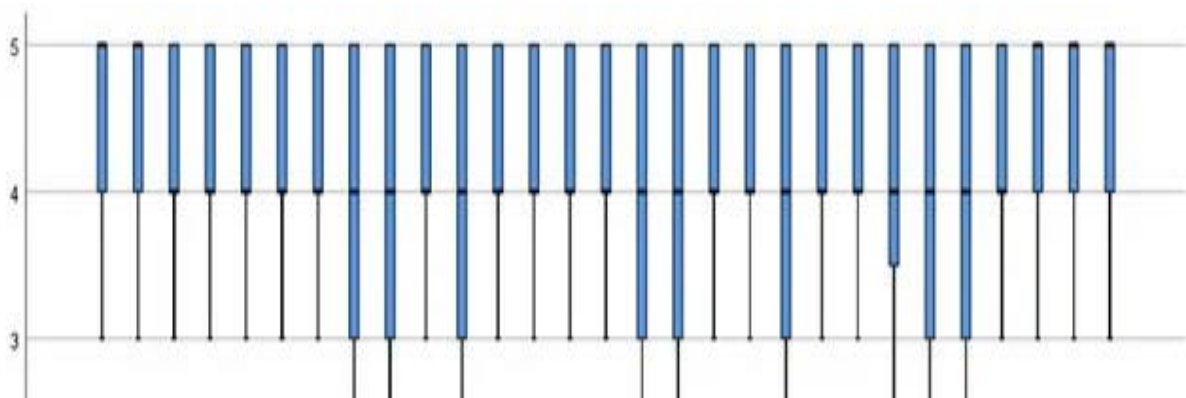
After removing outlier

4.3 Descriptive statistics, Correlation Matrix and normality analysis

4.3.1 Descriptive Statistics

This is the most important analysis in the research study. Because, based on the this table a researcher able to know about the characteristics of data. Moreover, it is defined as the

mirror of the variables. After cleaning data, researcher do the descriptive statistics prior to run data.

A descriptive statistic is a summary statistic that quantitatively describes or summarizes features from a collection of information, while descriptive statistics is the process of using and analyzing those statistics.

The descriptive statistics of the primary data set for relevant variables are presented in Table 4.3 shows the descriptive statistics for the variables.

Table 4.3 Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Aveg.L	1.667	5.000	4.279	0.843
Aveg.CSS	2.286	5.000	4.206	0.761
Aveg. R	1.500	5.000	4.063	0.809
Aveg. P	1.667	5.000	4.136	0.829
Aveg. CT	1.667	5.000	4.042	0.932
Aveg. WD	1.875	5.000	4.093	0.815
N	220	220	220	220

Where, Aveg.L; an average of sub-factors of loyalty, Aveg.CSS; an average of sub-factors of customer service and supports, Aveg.R; an average of sub-factors of Reliability, Aveg.P; an average of sub-factors of privacy, Aveg.CT; an average of sub-factors of customer trust and Aveg.WD ; an average of sub-factors of website design.

4.3.2 Correlation Matrix

A correlation matrix is a table showing correlation coefficients between sets of variables. it is said that correlation coefficient is high when the coefficient value is more than 50%. Table 4.4 shows the correlation matrix of the key variables.

Table 4.4 Correlation Matrix

	Aveg.CSS	Aveg. P	Aveg. CT	Aveg. R	Aveg. WD
Aveg.CSS	1.000				
Aveg. P	-0.180	1.000			
Aveg. CT	-0.142	0.140	1.000		
Aveg. R	-0.263	-0.240	-0.224	1.000	
Aveg. WD	-0.300	-0.430	-0.513	-0.142	1.000

4.3.3 Normality analyses

Table 4.5 shows the normality test of the study. This implies data is normally distributed or not. Based on the table we can see that skews and kurtosis along with the standard error. To recall, the number of observations is 220. There two different views of skews and kurtosis. Skews means the relative measure of the two tails. While kurtosis implies combined size of the tails (Gooddata, 2019).

Table 4.5 Normality Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Aveg.CSS	220	-0.947	0.164	-0.439	0.327
Aveg. R	220	-0.858	0.164	-0.260	0.327
Aveg. P	220	-1.038	0.164	0.188	0.327
Aveg. CT	220	-0.939	0.164	-0.192	0.327
Aveg. WD	220	-0.788	0.164	-0.674	0.327
Aveg.L	220	-1.123	0.164	0.237	0.327
Valid N (listwise)	220				

4.4 Reliability Test

In research reliability implies consistency of the same measurement. If the estimation if a data by using a software is same with the estimation by using another software that is called reliability. Table 4.6 shows the reliability test.

Table 4.6 Reliability test

Variables	Cronbach's Alpha	N of Items	Strength Of Association
Overall	0.975	29	Excellent
Customer Services & Support	0.904	8	Excellent
Reliability	0.799	4	good
Privacy	0.82	3	good
Customer Trust	0.87	3	good
Website Design	0.931	8	Excellent
Loyalty	0.86	3	good

4.5 Assumption for Multiple Regressions

4.5.1 Autocorrelation

Normally autocorrelation exists in time series data. When the data is not time-series data, it is not necessary to test for independence of residuals. For checking autocorrelation, Durbin-Watson test is used. When the DW value is close to 2, the assumption of independence is usually not violated. (Chatterjee & Simonoff, 2013). A value of 2.0 means there is no autocorrelation detected in the sample. Values from zero to 2.0 indicate positive autocorrelation and values from 2.0 to 4.0 indicate negative autocorrelation. (KENTON, 2019).

Table 4.7 Autocorrelation Test

Model Summary				
R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.864	0.747	0.742	0.428	2.003

4.5.2 Multicolinearity

Collinearity: collinearity exist when among the independent variables are corelated with each other. Whereas they make the more predictive power of the independent variables and then make the theory construct incorrect. (James, et al., 2017). When the variance inflation factor (VIF) is more than 10 then we can say there is multicollinearity exits.

Table 4.8 Multicollinearity Test

	Coff.	Std. Error	t-test	Sig.	VIF
(Constant)	0.544	0.157	3.462	0.001	
Aveg. CT	0.186	0.067	2.771	0.006	4.653
Aveg. R	0.200	0.072	2.778	0.006	4.072
Aveg. P	0.042	0.070	0.593	0.554	4.059
Aveg. WD	0.488	0.098	4.969	0.000	7.653
Aveg.CSS	0.382	0.080	4.778	0.000	4.778

4.5.3 Normality of the Dependent Variable

Figure 4.1 shows the normality test of the dependent variable. Based on the following figure, we can conclude that it is normally distributed.

Figure 4.1 Normality Test of the Dependent Variable
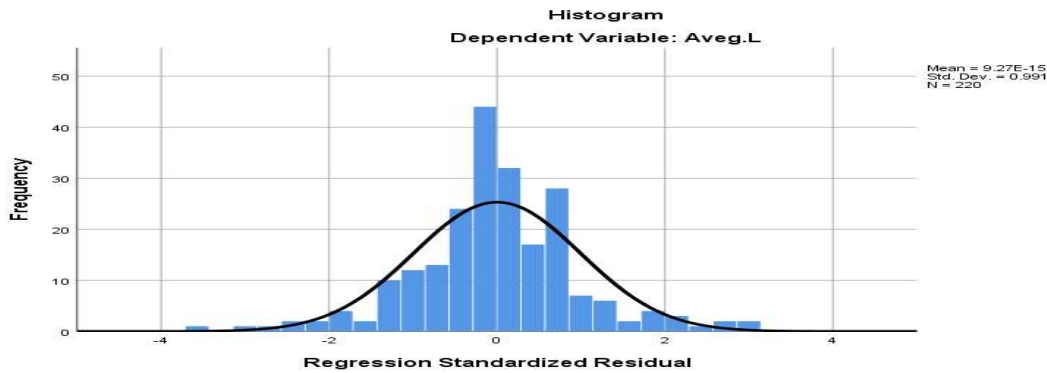
4.5.4 Normality of the Residuals

Figure 4.2 posits the normality test of the residual. Based on the Figure, it is observed that the observation is in line with the scatter plot line close to the mean line. Normality is the assumption that the underlying residuals are normally distributed, or approximately so. If the test p-value is less than the predefined significance level, you can reject the null hypothesis and conclude the residuals are not from a normal distribution.

Figure 4.2 Normality Test of the Residual

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Aveg.L
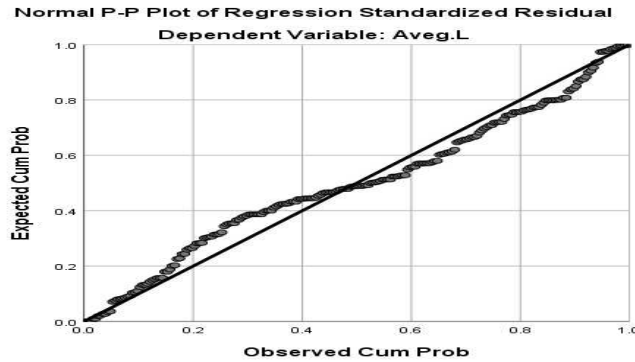
4.5.5 Homoskedasticity

Homoskedasticity is test of the data and variables weather it is corelated with each other's. before running the data set, a researcher should check homoskedasticity so that they aware of that their no homoscedasticity among the variables. Meanwhile the estimation would error free and unbiased. Therefore, a researcher must be clearer on that part and check data set. Figure 4.3 shows homoskedasticity of the dependent and independent variables.
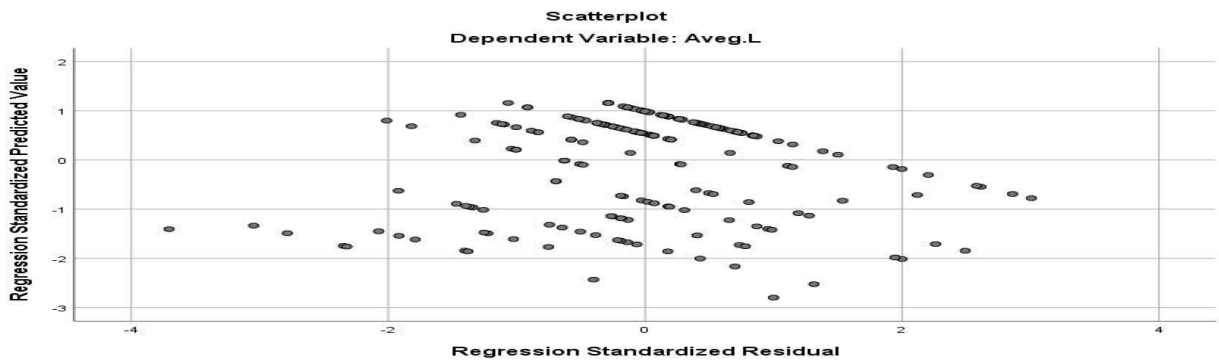
Figure 4.3 Homoskedasticity Test for Overall

Scatterplot
Dependent Variable: Aveg.L

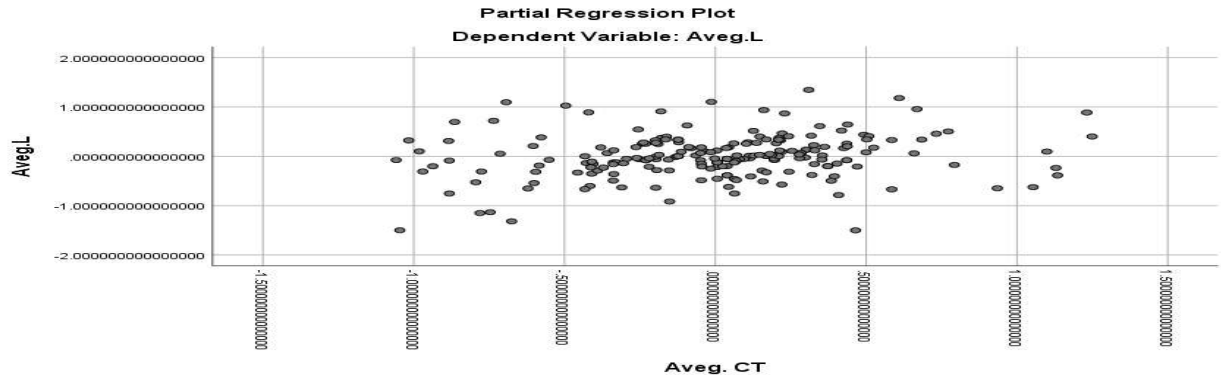**Figure 4.4 Homoskedasticity for Customer Trust**

Figure 4.5 Homoskedasticity Test for Reliability
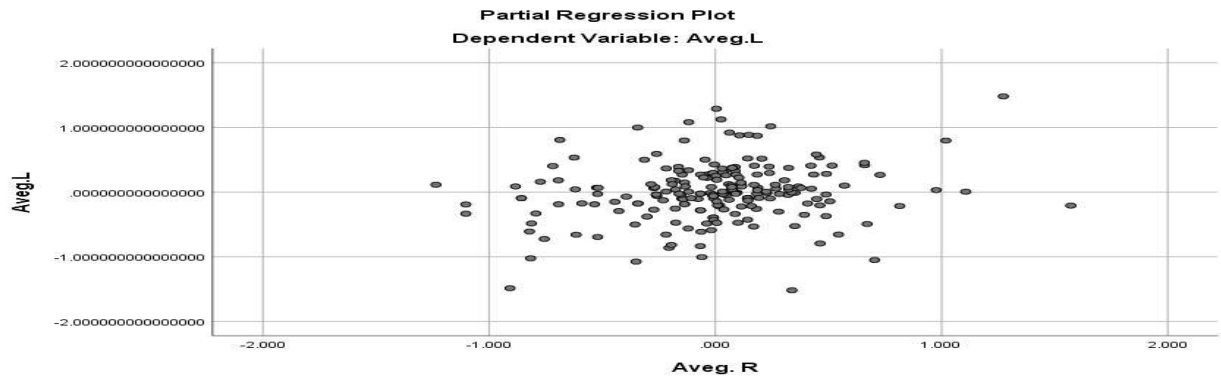
Figure 4.6 Homoskedasticity Test for Privacy
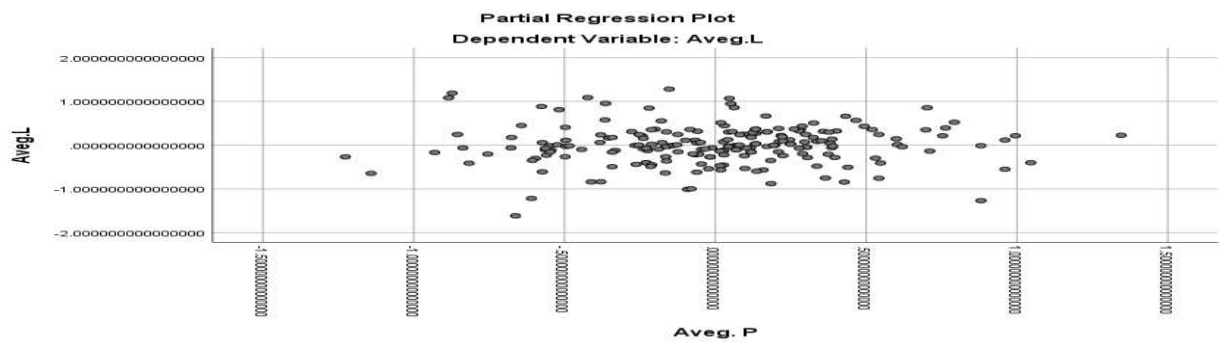

Figure 4.7 Homoskedasticity Test for Website Design

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Partial Regression Plot
Dependent Variable: Aveg.L
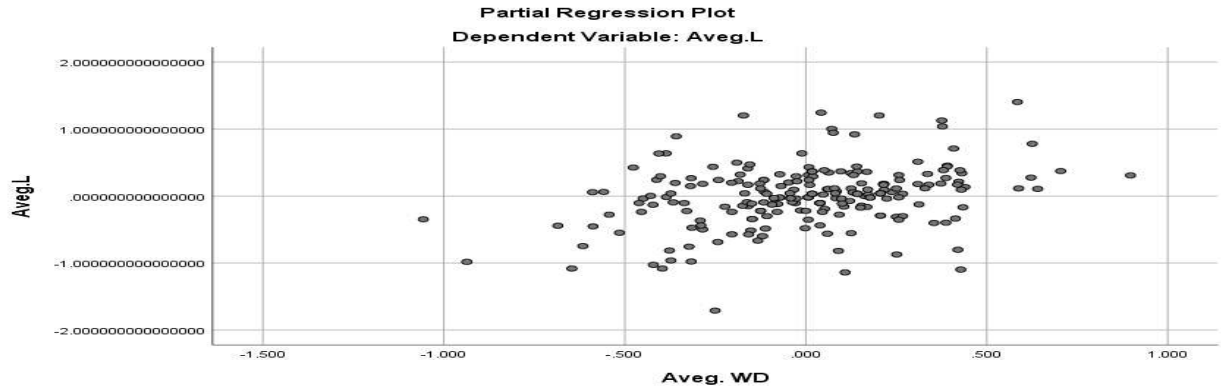
4.6 Regression Analysis

Model Fitness; R-squared is the most important for measuring fitness of the model. R-squared show significant of the independent variables on the dependent variables. Moreover, it measures the strength of the relationship between model and the dependent variable on a convenient 0 – 100% scale (Devore, 2011) and (Draper & Smith, 1998).

Table 4.9 Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	116.363	4.000	29.091	158.634	0.000
Residual	39.427	215.000	0.183		
Total	155.790	219.000			

Table 4.9 shows that the F statistic is 158.634 significant with 0.000 less than the alpha value (0.05), which means that the independent variables (Aveg.CSS, Aveg.P Aveg.WD and Aveg.R) also affect the dependent variable (Aveg.L). This indicates that the model is very important for this study. Similarly, if the same model is used for different populations, the F statistic is 158.634, indicating that the probability of obtaining similar results is high (Around 95%).

4.6.1 Discussion and Findings: Multivariate Results

This study has two types of analysis such as multivariate results and mediation results. The first part is the multivariate results while second part is the mediation results. Multivariate results indicate regressions results that estimate the relationship between dependent and independent

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variables. While mediation analysis implies the existence of the third variables. This variable shows that independent variables effects on the dependent variables through mediation variables. firstly, independent variable impact on the mediation variable while mediating variable consequently impact on the dependent variable.

Multivariate regression is a technique that estimates a single regression model with more than one outcome variable. When there is more than one predictor variable in a multivariate regression model, the model is a multivariate multiple regression. Moreover, a multivariate model is a statistical tool that uses multiple variables to forecast outcomes. Accordingly, Table 4.10 shows multivariate results for the dependent variable of customer loyalty that has been predicted by a number of predictor variables namely customer trust, reliability, privacy, and website design.

Based on Table 4.10, the R-sq value is 0.748 which shows that there is strong support of the independent variable on the dependent variable. More specially, the dependent variable, customer loyalty is variance by 0.748. R-sq implies the fitness of the model. If the R-sq values is more then 50%, it is categorized as the model is good fit. On the other hand, R-sq is less then 50%, the model is less fit.

After reviewing Table 4.10, it is observed that three variables namely, customer trust, reliability, customer services and support and website design show a strongly statistically significant and positive impact on customer loyalty. While although the coefficient of privacy is positive but not statistically significant and hance, we cannot explain that variable. In line with that customer, trust shows positive and statistically significant at 1% level meaning that if the customer trust is increased by 1% customer loyalty is also increased by 18%. Accordingly, reliability shows that it has influenced on customer loyalty by 20% that is statically significant at 1% as well. Furthermore, website design also shows that it has a great influence on customer loyalty by 0.488 which is statistically significant by 1% level. Finally, customer service and support show that it influences customer loyalty by 0.382 which is statistically significant by 1%. Therefore, based on the results, we can conclude that EBSQ (customer trust, reliability, website design, customer service and support) dimensions have a significant impact on customer loyalty towards the banking sectors.

4.6.2 Answer to The Research Questions 1 To 4.

1. **Does reliability have a significant impact on customer loyalty?**

Yes, it is intuitive to note that, based on the multivariate results, reliability shows statistically significant positive impact on customer loyalty. Faithful and convinced customer service is significantly impact on the customer loyalty. Better and more reliable service is the more better for the bank since customer behaviour is positive and become loyal to the banks. Therefore they have to be more positive and provide reliable service to the customers.

2. **Do privacy and security have a significant impact on customer loyalty?**

Yes, after reviewing multivariate results, the results show that privacy and security shows statistically and negative on the customer loyalty. This is the main task of the bank to provide the privacy and security to the customer. Since money and information is the most confidential, banks have to ensure this part significantly. If the banks less emphasize on the privacy and security on the customer's transections, it negatively impacts on customer loyalty.

3. **Does estimate and discuss website design have a significant impact on customer loyalty?**

Yes, website design has a statically significant impact on the customer loyalty. Today is the competitive world. In the competitive world, bankers need to do the more and more innovation. Website design is one kinds of advertisement of the banks. Reliable and informative information via website design is the most important for the banks. It positively impacts on the banks performance as well. therefore, bank should ensure they come out would latest information in the website design, customer will get the latest and updated information regarding bank's predicts and services.

4. **Does customer service and support have a significant impact on customer loyalty?**

Yes, customer service and support has statistically significant impact on the customer loyalty. To recall, main function of the banks provides good and better services to the customers. Once customer have a good service and innovated products, they feel a positive and favorable feelings

of the customer. Bank has to ensure hassle free service for the customer. Once they get hassle free service, they become loyal to the banks that is shown by the regression results.

Table 4.10 Multivariate Results

	Coff.	Std. Error	t-test	Sig.
(Constant)	0.544	0.157	3.462	0.001
Aveg. CT	0.186	0.067	2.771	0.006
Aveg. R	0.200	0.072	2.778	0.006
Aveg. P	0.042	0.070	0.593	0.554
Aveg. WD	0.488	0.098	4.969	0.000
Aveg.CSS	0.382	0.080	4,778	0.000
R-sq	0.748			
N	220			

4.7 Discussion and Findings: Mediation Analysis

The second part the study is the mediation analysis. This section presents the mediation role of customer trust on the relationship between EBSQ dimension and customer loyalty. To recap, this study uses customer loyalty as a dependent variable, customer trust as a mediation variable and several EBSQ dimensions (i.e., customer service and support, reliability, privacy, and website design) as an independent variable. Based on the typology of mediation, there is direct and indirect effect of the independent variables. Firstly, independent variables directly effect on the dependent variables (path c'), secondly, independent variables impact on the mediation variables (path a), thirdly mediation independent variables along with mediating variable impact on the dependent variable (path b).

If see following mediation typology, there are three mediation effects such as partial mediation, full mediation and no mediation affects. **Firstly**, partial mediation means there are other possible omitting mediating that may be affects the relationship between EBSQ dimensions and customer loyalty. Partial medial has two part namely competitive and complementary mediation effects. Competitive mediation implies that the sign of the coefficient of the path a and path b is in opposite direction. While complementary mediation implies the sign of coefficient of the path a and path b

is in the same direction. Secondly, full mediation implies that independent variables indirectly impact on the dependent variable via mediation role of market structure. Finally, no mediation shows that there is only direct impact of independent variables on the dependent variable without intemperance of the mediating variable.

Table 4.11 shows three panels as panel A implies the impact of independent variables (X) on the mediating variables ((M), panel B shows the impact of the mediating variable (X) on the dependent variable (Y) and finally panel C that posits impact of independent variables (X) on the dependent variable (Y). Therefore, it is observed that there is a three-dimensional impact. Accordingly, a number of variables are proxied as the independent, mediating and dependent variables. customer service and support, privacy, reliability, and the website design are shown as the independent variables, customer trust works as a mediating variable and customer loyalty work as a dependent variable.

Based on results from Table 4,11 and Table 4.12, it is observed that there are two impacts such as complementary and indirect only mediation. If we see the following, there are five types of mediation namely, complementary, competitive, direct, indirect and no effects while those types categorize into three mediation effects namely, partial mediation effects, full mediation effects and no mediation effects.

NO	Types of Mediation	Mediation Effects	Description
1	Complementary Mediation		The indirect effect (path a x b) and direct effect (path c) both significant and the signs pointing the same direction
2	Competitive Mediation	Partial Mediation	The indirect effect (path a x b) and direct effect (path c) both significant and the signs pointing the opposite direction
3	Indirect Only Mediation	Full Mediation	The indirect effect (path a x b) is significant, but the direct effect (path c) is not significant

4	Direct Only No-Mediation		The indirect effect (path a x b) is not significant, but the direct effect (path c) is significant
5	No Effect; Non-Mediation	No mediation	Neither the indirect or direct effect is significant

Source: (Ramli, 2014; Zhao et al., 2010; Rucker et al., 2011; Hair et al., 2013)

As observed from Table 4.11, there is a strong mediation effect of customer trust on customer loyalty. Meaning that customer trust shows both partial (complementary) and full (indirect only mediation) effects on the dependent variable (customer loyalty). More especially customer service and support, reliability and website design show partial mediation (complementary) effects (see in the diagram of Figure 4.8, Figure 4.9 and Figure 4.11) respectively. While privacy shows full mediation (indirect only) effects. These mediation effects are strongly supported by Table 4.11; mediation test analysis results.

Complementary mediation: Figure 4.8 shows the complementary mediation of customer trust between customer service and support (Aveg.CSS) and customer loyalty (Aveg. L). Based on the figure, it shows that path a (X   M), customer service and support (Aveg.CSS) positively impacts the customer trust (Aveg.CT), i.e., $\beta = 0.175$, p-value = 0.034 which is significant at 1% level, meaning that a 0.01 increase in Aveg.CSS increase Aveg.CT by 0.175 which implies that higher customer service and support greatly and positively increase the behavior of the customer and hence increase the customer trust towards the loyalty. While in turn, path b (M   Y) shows customer trust (Aveg.CT) positively impacts the Aveg.L, $\beta = 0.142$, p-value = 0.026 which is significant at 1% level, meaning that a 0.01 increase in Aveg.CT increases Aveg.L by 0.142. The mediator role of Aveg.CT between customer service and support (Aveg.CSS) and customer loyalty (Aveg.L) shows complementary mediation effects. In a nutshell, once a bank increases customer

service and support that would increase the behavior of the customer which in turn affects the increase of customer loyalty (e.g., Aveg. CSS   Aveg.CT   Aveg.L).

Based on the relationship, this study concluded that the sign of indirect path coefficient (a x b) is positive while the sign of path coefficient c is also positive meaning that the sign of both path coefficients is in the same direction that represents the complementary mediation effects.

Indirect only mediation: Figure 4.10 implies that the mediator role of customer service and support between privacy (Aveg.P) and customer loyalty (Aveg.L) shows indirect only mediation effects. Based on the figure, path a (X   M), privacy (Aveg.P) negatively impacts customer trust (Aveg.CT), i.e., β = -0.148, p-value = 0.035 which is significant at 1% level, meaning that a 0.01 increase in Aveg.P reduces Aveg.CT by 0.148 which implies that a higher level of privacy reduces customer trust. While path b (M   Y), Aveg.P negatively impacts the Aveg.CT i.e., β = -0.148, p-value = 0.035). The mediator role of Aveg.CT between Aveg.P and Aveg.L show indirect only mediation effects. Hence, higher bank privacy would reduce customer trust, which in turn increases customer loyalty (e.g., Aveg.P   Aveg.CT   Aveg.L). Finally, directly affects path c (X   Y) Aveg.CT does impact on the customer loyalty (Aveg.L), i.e., β =0.142, p-value = 0.0.026.

4.7.1 Answer To The Research Question 5

Based on the mediation results, we can answer the research questions 5, that is Does moderated mediation role of customer trust impact customer loyalty?

Yes, it is intuitive to note that there is strong mediation effects (partial and full mediation effects) of customer trust on the relationship between EBSQ dimensions and customer loyalty. The finding

is very interesting and intuitive, and it answers the research question 5 that Does moderate mediation role of customer trust impact customer loyalty?. Stockholders can take the strategic decisions based on the findings. They should be more focus on the stated dimensions of the EBSQ so that they take corporate and strategic decision on that dimensions of EBSQ. To the best of my knowledge, this is the significantly value addition in the literature.

Table 4.11 Statistically Significant Value (Mediation Analysis)

		coef.	std.err	t-value	p-value
Panel-A	**X on M**				
Aveg.CSS	->Customer trust (Aveg.CT)	0.1758	0.0828	2.1200	0.0340
Aveg.R	->Customer trust (Aveg.CT)	0.2480	0.0726	3.4200	0.0010
Aveg.P	->Customer trust (Aveg.CT)	-0.1483	0.0705	-2.1000	0.0350
Aveg.WD	->Customer trust (Aveg.CT)	0.7799	0.0880	8.8600	0.0000
panel-B	**M on Y**				
Aveg.CT	->Customer loyalty (Aveg.L)	0.1420	0.0636	2.2300	0.0260
panel C	**X on Y**				
Aveg.CSS	->Customer loyalty (Aveg.L)	0.4074	0.0790	5.1600	0.0000
Aveg.R	->Customer loyalty (Aveg.L)	0.1462	0.0692	2.1100	0.0350
Aveg.P	->Customer loyalty (Aveg.L)	-0.0381	0.0673	-0.5700	0.5710
Aveg.WD	->Customer loyalty (Aveg.L)	0.4584	0.0840	5.4600	0.0000
R-sq-Aveg.CT		0.7890			
R-sq-Aveg.L		0.7710			

Table 4.12 Mediation Test Analysis Results of Customer Loyalty (Aveg.L)

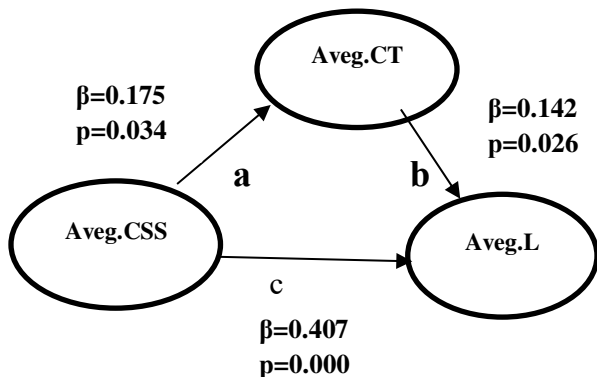| Path coefficient	Bootstrap t-test	Mediation Role	Mediation typology
Aveg.CSS->Aveg.CT->Aveg.L	1.580	Supported	Complementary Mediation
Aveg.R->Aveg.CT->Aveg.L	1.390	Not Supported	Complementary Mediation
Aveg.P->Aveg.CT->Aveg.L	-0.180	Not Supported	Indirect Only Mediation
Aveg.WD->Aveg.CT->Aveg.L	2.870	Supported	Complementary Mediation

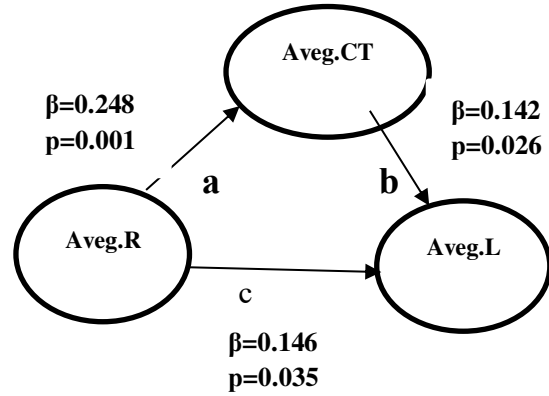**Diagram for Mediation Analysis**

Figure 4.8 : Complementary Mediation

β=0.175
p=0.034

a

β=0.142
p=0.026

b

Aveg.CT

Aveg.CSS

Aveg.L

c

β=0.407
p=0.000

Figure 4.9 : Complementary Mediation

β=0.248
p=0.001

a

β=0.142
p=0.026

b

Aveg.CT

Aveg.R

Aveg.L

c

β=0.146
p=0.035
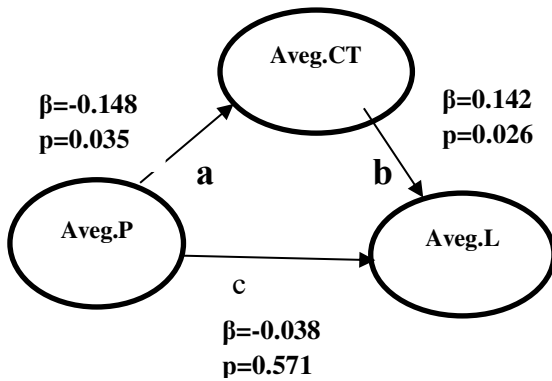
Figure 4.10 : Indirect Only Mediation

β=-0.148
p=0.035

a

β=0.142
p=0.026

b

Aveg.CT

Aveg.P

Aveg.L

c

β=-0.038
p=0.571
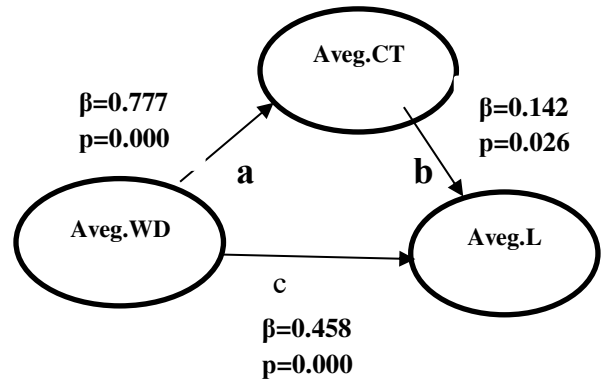
Figure 4.11 : Complementary Mediation

β=0.777
p=0.000

a

β=0.142
p=0.026

b

Aveg.CT

Aveg.WD

Aveg.L

c

β=0.458
p=0.000

5.0 Conclusions, Policy Recommendations and Limitation

5.1 Conclusions

This study has been conducted on "The Influence Of E-Banking Service Quality on Customer Loyalty: A Moderated Mediation Approach". Primary data of 220 respondents from the banks are selected from the 5 commercial banks that are incorporated in Malaysia. To analyze data SPSS software is used.

To recap, the conceptual framework is designed based on the EBSQ dimensions such as customer service and support, customer loyalty, customer trust, privacy, reliability, and website design. Whereas customer loyalty works as a dependent variable, customer service and support, privacy, reliability, and privacy work as an independent variable and customer trust work as a mediating variable.

Based on the estimation results it is shown that EBSQ dimensions has the significant impact on the banking sectors. More specially, customer trust has mediated the relationship X (i.e., customer trust, privacy, reliability, website design) and Y (customer loyalty). Customer trust shows the partial and full mediation affects in explaining relationship between X and Y. Namely, customer service and support, reliability and website design shows the complementary mediation effects while privacy shows indirect only mediation effects.

5.2 Policy Recommendation

Based on the analysis, we can conclude a number of policy implications for the stockholders along with the academicians. Firstly, since bank works as an agent of the economy and play as an intermediary role (i.e., financial, and non-financial intermediary role), therefore it has great impact on shaping the economy. Secondly, government can get support from the banking actives since shaping economy following impact on GDP. Thirdly, practitioners have to look at the customer behaviour since analysis shows customer trust works as mediating role in explaining relationship between EBSQ dimensions and customer loyalty. Privacy shows negative impact on the customer trust while in turns customer trust positively impact on the customer loyalty.

5.3 Limitation and Suggestions for Future Research

This research mainly surveys the 220 customers of the commercial banks of five banks that are incorporated in Malaysia, but future research can do with many customers along with many banks. Therefore, although the results obtained in this study are satisfactory and have received a very positive response, this is limited to the scope of the respondents' imagination and there is no practical basis to prove that their views are correct. Future research also can include other dimensions instead of EBSQ dimensions to analyze and measure customer loyalty.

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Appendices

Research Questionnaire

'The influence of e-banking service quality on customer loyalty: moderated mediation approach in Malaysia'

* Required

Personal Information

1. What is your Gender? *

1 Female

2 Male

3 Prefer not to say

4 Other

2. What is age criteria? *

1 18-35

2 36-45

3 45-60

4 60 & Above

3. What is your occupation? *

1 Student

2 Job

3 Business

4 Other

4. What is your education qualification? *

1 High School

2 Graduate

3 Post-Graduate

4 Other

5. What is your monthly income? *

1 0 to 3000 MYR

2 3000 to 6000 MYR

3 6000 to 9000 MYR

4 9000 & Above MYR

Bank Account Information

6. What type of account do you have? *

1 Saving

2 Current

3 Business

4 Other

7. What is primary criteria to select banking service? *

1 Convenience

2 Service Quality

3 Availability of ATM

4 Others

Tangibles-customer service

8. Do your bank has sufficient number of branches and ATM? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

9. Do your bank provide all evidence in return of payment? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

10. Do your bank provide all the latest e-banking facility? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

11. Has your bank have latest infrastructure? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

12. Do your bank physical facilities are visually appealing? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Reliability

13. Do your bank E-banking service is error free with zero downtime? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

14. When you have a problem, the customer care of your bank shows a sincere interest in solving it? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

15. Do you experience any delay in online transaction of your bank ? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

16. Is your bank and customer relationship good? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Responsiveness-customer service & support

17. Do your bank employee always willing to help customers? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

18. Do your bank employee helps to use all the latest features of e-banking services? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

19. Do your bank employees are never too busy to respond customer's request? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Assurance-privacy

20. Is the behavior of the bank employees instill confidence in customers? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

21. Do you feel safe with all your bank transactions? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

22. Are the bank employees consistently courteous? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Empathy-customer trust

23. Do your bank gives individual attention to the customers? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

24. Are you able to customize or personalize the service from your end? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

25. Do your bank operating hours are convenient to the customers? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

E-banking Service-website design

26. Do your bank E-banking service is easily accessible? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

27. Is your bank online banking security good? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

28. Do you not feel log-in, lagging and connectivity issue while using E-banking service of your bank? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

29. Does online banking features of your bank is very user friendly and easy to use? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

30. Do your bank online banking website response is quick? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

31. Do you not experience delay in online transaction? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

32. Are you able to customize or personalize the online banking account from your end? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

33. Are you satisfied with your bank? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Customer Loyalty

34. What facility make you the loyal customer of your bank? *

1 Bank Branches and ATM

2 E-Banking services

3 Friendly employee and quick response of customer care

4 Bank Security

5 All of the above

35. Will you recommend your bank to your friends and your family members? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

36. The E-banking service provided by your bank is one of the reason for customer loyalty? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

37. Are you loyal to your bank? *

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree