

Customer Satisfaction with Alipay in HongKong

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Abstract

The research purpose is providing an overall view of the customer satisfaction for accessibility and security evaluation. The aim of the research is used to purposes to investigate the customer satisfaction for accessibility and security using Alipay. This paper focuses on HongKong people and Visitors to HongKong to collect raw data out from questionnaires. this study will also explain the scope and operational definition of the study to further understand the study, Customer satisfaction is exciting in attracting new customers and keeping loyal customers in the highly competitive online payment industry, As online payment becomes a new business platform for products and services, this study attempts to explore the impact of customer satisfaction with Alipay usage in HongKong, the industry's intention to buy, where social media marketing has not become a popular tool for marketing, This study focused on the survey of customer satisfaction with Alipay from local HongKong people and Hong Kong travelers. The survey was conducted randomly in Hong Kong and major shopping malls. The target group of this study is people from different levels. This study will focus on how accessibility and security as independent variables affect customer satisfaction in Hong Kong. In summary, the research found that the tangibility has no positive significant influence with Alipay in HongKong, also the accessibility and security have positive significant influence with Alipay in HongKong, at then, the security is higher than accessibility for this research.

Keywords

Alipay, Accessibility, Tangibles, Security.

1. Introduction

1.1. Overview

This chapter provides an overall view of the customer satisfaction for accessibility and security evaluation. The aim of the research is used to purposes to investigate the customer satisfaction for accessibility and security using Alipay. This paper focuses on HongKong people and Visitors to HongKong to collect raw data out from questionnaires. this chapter will also explain the scope and operational definition of the study to further understand the study.

1.2. Background



Figure 1. the huge reliance on the technology(PYMNTS,2018)

The graph 1 shows that the region for the using of Alipay, it illustrates that there are so many countries in Asia come into Alipay market, in recently. it stars to expand to other areas like Europe, it is due to the highly accessibility and security for online and mobile payment (Ahire and Dreyfus, 2005). Alipay is based on the band account, so the first step is that customer need to apply a bank card, in china, it can be finished it at most 2 hours, it easy for us to own many cards, but for many other countries, it may need 1 month (Anderson and Gerbing, 2016). because the cost of the production, finance management, fund settlement and so on are really enormous, it is difficult for a bank itself to make so many cards at the same time (Barker, 2016). while in china, they supported by the government, so it become easier, If the political don't change, Alipay may not enter there forever (Zhihu, 2015).

Alipay is online platform payment which use the online and mobile phone to pay anything easy, including car, food and wage payment as long as the shopkeeper establish the Alipay online payment service (Baumgartner and Homburg, 2016). The customer satisfaction is evaluation standard for service and goods, it can be measured of how a company's services and product meet or exceed customer expectations (Bounds, Adams and Ranney, 2015). the accessibility and security are the key affected factors for customer satisfaction with Alipay, so this research aim to evaluate the accessibility and security for customer satisfaction with Alipay in HongKong (Bergman, 2015).

1.3. Problem Statement

The focuses of this study are to determine customer satisfaction with Alipay in HongKong, the HongKong is one of the fastest cities in the world, this city has many fast food and FMCG (fast moving consumer foods) (Rungtusanatham, 2016). the people often speedy to do anything, including eat lunch and buy something, it is the best way to investigate the customer satisfaction of accessibility and security in HongKong, it can easy to show the different customer satisfaction in every county (Bergman, 2015). the HongKong people often say time is money, in order to adapt to the global work and life rhythm speeding up, the KongHong people prefer fast payment (Cimento, 2104). when people use the bank on the net or mobile banking payment when people try to use more time on the life and work, reduce the unnecessary waste of time, so it is a trend in the future, Society in constant progress, people's living and consumption of water is constantly improving (Oakland, 2015). people prefer to choose more rapid way of consumption, such as fast food, fast coffee, fast delivery service, express delivery, people never

leave home can enjoy the world, so this research aim to investigate the customer satisfaction for accessibility and security with Alipay in HongKong (Bowen, 2017).

1.4. Research Objectives

The research objective Describe the purpose of this study and the results expected in this study (Tabachnick and Fidell, 2015). This descriptive study intends to achieve the following research objectives:

To determine whether the accessibility influence customer satisfaction with Alipay in KongHong.

To find out whether the security influence customer satisfaction with Alipay in KongHong

To find out whether the tangible influence customer satisfaction with Alipay in KongHong

1.5. Research Questions

The research questions Designed to guide and study this research to achieve research goals (Tabachnick and Fidell, 2015). This study will answer the following research questions here:

will the accessibility influence the customer satisfaction with Alipay in HongKong?

will the security influence the customer satisfaction with Alipay in HongKong?

will the tangible influence the customer satisfaction with Alipay in HongKong?

1.6. Significance of Study

Alipay debuted as a simple electronic payment system, but it is itself a destination application (Rahman, 2014). In addition to allowing consumers to shop online, Alipay has a large built-in user base and has recently provided a range of financial services to those who previously lacked payments, money market accounts and small business loans (Silvia and MacCallum, 2013). The Hong Kong is a center of Asian financial in the world, the study aim is to research the relationship between customer satisfaction and accessibility/security with Alipay in HongKong, it can help people to understand the Alipay usage situation in HongKong (Bowen, 2014).

1.6.1. Significance to Academe

This study is based on the accessibility, security and tangibility for customer satisfaction with Alipay in HongKong, this research uses the Expectation-Uncertainty Paradigm (EDP) academe theory (LaHay and Noble, 2014). and aim is to evaluate the accessibility, security and tangible for customer satisfaction, and also there is little research in similar areas (Treacy and Wierema, 2014).

1.6.2. Significance to Industry

As more and more higher online payment was found (including google pay, PayPal, etc.), competition between these company is considered a major issue (Lbianca, 2013). These company need to work hard to promote sustainable competitiveness in order to survive in a highly competitive environment (Yeung and Chan, 2015). Therefore, the research shows that it is important for online payment company to actively monitor the quality of the services they provide and to focus on continuous improvement to overcome the obstacles facing increasing competition (Willett, 2016). The customer satisfaction is the KPI (key performance index) in service industry, so the research results intend to provide suggestions to Alipay in HongKong they could emphasize and look into while planning for new business or design new technology (Westphal, Gulati and Shortell, 2017).

1.7. Scope& Limitations of Study

Scope of study

Customer satisfaction is exciting in attracting new customers and keeping loyal customers in the highly competitive online payment industry, As online payment becomes a new business platform for products and services, this study attempts to explore the impact of customer

satisfaction with Alipay usage in HongKong, the industry's intention to buy, where social media marketing has not become a popular tool for marketing, This study focused on the survey of customer satisfaction with Alipay from local HongKong people and Hong Kong travelers. The survey was conducted randomly in Hong Kong and major shopping malls. The target group of this study is people from different levels. This study will focus on how accessibility and security as independent variables affect customer satisfaction in Hong Kong.

Limitations of study

Although this research has been carefully prepared, there are some limitations that impact the customer satisfaction with Alipay in HongKong. Due to time constraints, this study was only conducted in the center of Hong Kong. Due to the limited sample capacity (Gilbert, 2015). including local and international populations, the sample size is too small to make general conclusions about the accessibility and security factors affecting customer satisfaction in Hong Kong. In addition, the study was limited to the use of questionnaires as a theory for data collection and related research, and the studies used in this study only revealed one relationship. Related research does not provide a definitive reason to explain why a relationship as a related variable does not reveal which variable affects another variable.

1.8. Operational Definition

In this study, there are some main terms that make this study sound more precise. The detailed definition as below:

Customer satisfaction means that the degree of satisfaction over the services of an online payment platform as measured by frequency of customers usage (Oliver, 2016).

Accessibility means that it is the most important service quality index to judge the customer satisfaction in global business, and every different field can use the accessibility to evaluate the service quality index(Anderson,2014).

Security means that the security includes all internal and external processes implemented by internal information systems. The current situation requires commercial online payment to pay special attention to electronic payment platform. To meet the demands of consumers and demand (Bilan, 2015)

Tangibility means that the highest quality of service factors affecting customer satisfaction, The Alipay resources such as application facilities, software and hardware support, and customer services system are the most important aspects that affect customer satisfaction (Taylor, 2017)

Expectation-Uncertainty Paradigm (EDP) theory means the underlying grounded theory of this study is the theory of Expectation-Uncertainty paradigm by (Oliver, 1977) proposed the Expectation-Uncertainty Paradigm (EDP) as the most promising theoretical framework for assessing customer satisfaction. This model means that when consumers purchase goods and services, there is a pre-purchasing expectation of expected performance (Oliver, 1980).

1.9. Organization of Chapters

As a process of this research, there will be several chapters:

Chapter 1 describe the general of overview study, research background and service quality of the academic customer satisfaction, it is important for limitations of the research, as well as the research objectives of the research questions and operational definitions, are introduced.

Chapter 2 review on vast literature review on customer satisfaction for accessibility and security to have a better understanding of the recent related studies, whether impact the customer satisfaction with Alipay in HongKong, and use the Fundamental Theories which resource is to support the hypothesis and research questions.

Chapter 3 discussed the research methodology for analysis, such as research design, research population, sampling plan and collection, pilot test, correlation analysis, questionnaire design and data analysis are discussed.

2. Literature Review

2.1. Overview

This chapter aims to review the literature on all variables related to this study. First, the theory of reasoned actions acts the fundamental grounded theory to govern this research. This chapter defines customer satisfaction connotations as independent variables and aims general population and tourist as target audiences. At the same time, it also discovered that the literature gap provides more space for further research.

2.2. Customer Satisfaction

Customer satisfaction was specified satisfaction goals, as he defines that It can be measured of how a company's services and product meet or exceed customer expectations (Kruck, 2014). Customer Satisfaction definition by "the number of customers, or the percentage of the total customers (Anderson, 2014). The experience of the companies, products, or services (ratings) they report exceeds the specified satisfaction goals, However, the customer satisfaction is the major way to judge the goods and service whether is benefit for our live and life (Schulze, Skiera and Wiesel, 2016).

From a global perspective, marketing accountability standards board (MASB) confirmed to appear in the marketing metrics definition, purpose and structure of indicators, this is their common language in the customer satisfaction is part of the (vrncianu, 2015). In a study of nearly 200 senior marketing manager's survey, 69% of the people answered and said to them, they found that the customer satisfaction index in the management and monitor their business practical effect (Seth, 2014). It is the same key performance indicators (KPI) within the company and is usually part of the balanced scorecard, In a highly competitive market, enterprises compete for customers, and customer satisfaction is the same as the key segmentation goal, and is increasingly becoming a key element of business strategy (Goyal, 2014). Customer satisfaction is a leading and sustainable indicator of consumers' purchasing intention and loyalty, and customer satisfaction data is one of the most common market perception indicators (stavis, 2015). In group, organization, collection, analysis and dissemination of these data to send a message, that is the importance of taking care of customers, and ensure them to the company's products and services have a positive experience (Steve, 2015). Although can sales or market share, indicating the company's current performance, but customer satisfaction could be the future customers if it is possible to buy the best indicators of a lot of research, the research focuses on the relationship between customer satisfaction and retention (Kruck, 2016). Studies have shown that in extreme cases, satisfaction has the strongest impact, In the 5-point evaluation, "those who think they are satisfied with a level of 5 are likely to be repeat visitors, or even evangelists of the company" (Ondeige, 2010). the second important indicator associated with satisfaction is the willingness to recommend. The index definition by "how many of the customers surveyed said they would recommend a brand to his friends" (Stavins, 2015). When a customer is satisfied with a product, he or she may recommend it to friends, colleagues and relatives, this can be a powerful marketing advantage (Bearden, 2015). By contrast, those who rated themselves as "1" were less likely to return, in addition, they may make negative comments to potential customers, which will harm the development of the company. The willingness to recommend is a key indicator of customer satisfaction (Brady, 2016).

2.3. Factor of Accessibility, Security and Tangibles

2.3.1. Accessibility

the accessibility is the most important service quality index to judge the customer satisfaction in global business, and every different field can use the accessibility to evaluate the service quality index (Anderson, 2014). Although researchers in the service quality field often discuss the competitive advantages of improved service quality, few people clearly state which quality of service dimensions may provide important competitive advantages (Andreasen, 2015). A variety of studies have shown that one dimension is more important than another - there is no need to link the improvement of a particular dimension with the improvement of satisfaction ratings and behavioral intentions (Bearden, 2015). Current research shows that the most critical factors for industrial satisfaction (at least in the field of information technology) are availability and delivery (Heskett, Sasser and Schlesinger, 2014). These two dimensions of service quality have a direct impact on the formation of industrial satisfaction at the purchasing decision center—thereby providing managers with a strategic area for increasing satisfaction (Brady, 2014). For example, two key issues managers can focus on are the time needed to find a responsible person in the supplier's company and the company's response to the information left by potential buyers (Ozdemir, 2016). Similarly, the delivery process of core products or services clearly shows that in addition to the accessibility and quality of a superior product or service, modern organizations need to provide consistent, accurate and reliable delivery (Churchill, 2014). Relationships are always important in any B2B environment, it is necessary to identify these relationships and improve the accessibility of relationships with business partners (Reichheld, 2016).

2.3.2. Security

Network security problem is one of the biggest problems facing the world today, people through the network to a lot of information exchange and use of, if not improve network security problems in the world and that is a fatal problem for human beings (Gruca, 2015). People now exist in a world with rapid development of the information technology, more and more people upload their private information for the using of online tools, especially for the online payment tools (Gupta, Lehmann and Stuart, 2014). Internet need the customers' true name, password, address, ID number, telephone number and so on, it includes all important information of the customers (Taylor, 2017). Even though, the Alipay make sure they use information stealing issue in 2010, one of the technician download a lot of customers' data to sell, even if the password was not stolen, the capital wasn't taken away, other amount of information still makes the criminals get a lot of profit (Heskett, Sasser and Schlesinger 2014). The most of this information were sold to sellers, then the customers got more and more crank calls, And the information spread so fast one by one, it is not convenient to find the original criminals (Zong, 2016).

2.3.3. Tangibles

In the Global marketing environment, Tangibility are the highest quality of service factors affecting customer satisfaction, The Alipay resources such as application facilities, software and hardware support, and customer services system are the most important aspects that affect customer satisfaction (Taylor, 2018). The current research results show that the tangible needs to determine the business partners. In case of service failure, they will be able to provide an answer for their needs (Rust, 2015). A good tangible is not limited to the nature of technical solutions, of importance is the timeliness and promptness of interventions in the process of solving practical problems (Schellhase, 2014). Internet security is a branch of Internet-related computer tangible that usually involves the required browser tangible references, but it also involves more general network tangible because it applies to other applications or operating systems (Taylor, 2017). Its goal is to develop rules and measures to deal with attacks on the

Internet, The Internet represents an insecure channel for exchanging information, resulting in high risk of intrusion or fraud, such as phishing, network viruses, Trojans, worms, etc (Zong, 2016).

2.4. Linkage between Customer Satisfaction and Accessibility & Security & Tangibles

2.4.1. Linkage between Accessibility and Customer Satisfaction

The service quality is the basic definition for Customer satisfaction, the service quality including many factors, the one of the most important influence is accessibility (Fornell, 2014). The availability of digital banking is related to the ease with which customers access financial services, Tools, their accounts, conveniences and funds obtained from their accounts using various digital channels, namely online banking facilities, ATMs, POS terminals, mobile phones Just need to mention some (Larivi`ere, 2013). accessibility defines how these channels provide users with a meaningful experience Clients receive information on funding, access to banking facilities and services, and feedback (Kumar and Shah, 2014). It determines Does the customer find that the product meets their needs when they want it? This is their purpose the bank is convenient (Villers, 2012). Access to information and opinions that consumers can easily share They know and online or offline payment plan, Good experience can be easily shared online Negative people, they also eliminate the need for buildings and office equipment, No need more and more ATMs or banking for servicing with people in the city (Kozlowski, 2014).

2.4.2. Linkage between Security and Customer Satisfaction

In the management of online payment, security is a signal that is related to a large number of payment actions, the safety of the payment sector is determined by many factors (Murugiah, 2015). Online payment security is a complex system that includes many activities, such as capital management in credit, market and operational risk, Process safety of operational risk (Nochai and Nochai, 2015). as the internal processes or failure or external conditions lead to the risk of loss of human capital, physical security and bank branches and ATM cash protection (Villers, 2014). System security includes all internal and external processes implemented by information systems, the current situation requires commercial Banks to pay special attention to electronic banking, To meet the demands of consumers and demand (Bilan, 2015), a comprehensive customer care and bank customer satisfaction is a focus of attention of researchers and bankers because it represents the most companies an important market variable, especially those who work in the competitive market (belals, 2016). researchers are trying to determine the main determinants of bank customer satisfaction and study these problems from different perspectives (Kozlowski, 2016).

2.4.3. Linkage between Tangibility and Customer Satisfaction

According to Yator (2016), the dimensions of tangibility objects are described as physical qualities such as equipment, equipment, and personnel appearance (Villers, 2015). Facilities such as fully software of App or trained personnel can influence customers' perceptions of the quality of tangible goods, At the same time, Alsaqre (2014) suggested in his research that all specific factors of service quality must be given high attention because these factors have an impact on customer loyalty and can bring more profits to the company (Alsaqre ,2014). Tangibility can bring the fast payment, the buyer can see the payment status immediately after successful payment, so it is fast; Alipay can buy all goods on Taobao, pay for coal, electricity, gas, so convenient!3, It is safe to use Alipay when purchasing goods (Schulze, Skiera and Wiesel, 2014). When payment is made, the money will not be directly sent to the other party but will not reach the seller until the goods are received and confirmed. In this respect, Alipay is equal to a third party (Tuli, 2015).

2.5. Fundamental Theories

The underlying grounded theory of this study is the theory of Expectation-Uncertainty paradigm by (Oliver,1977) proposed the Expectation-Uncertainty Paradigm (EDP) as the most promising theoretical framework for assessing customer satisfaction, This model means that when consumers purchase goods and services, there is a pre-purchasing expectation of expected performance (Oliver,1980). Then the desired level becomes the standard for judging the product, that is, once the product or service is used, the results will be compared with expectations, If the result is consistent with the expected confirmation (Tuli, 2015). Do not confirm where the difference between expectations and results occurs, Due to the positive or negative difference between expectation and perception, customers are either satisfied or dissatisfied (Koskosas, 2015). Therefore, when the service performance is better than the customer initially expected, there is a positive uncertainty between expectations and performance, which leads to satisfaction, and when the service performance is as expected, there is a gap between expectations and perception (Kruck, 2014). Confirm that this will lead to satisfaction, On the contrary, when the service performance is not as good as the customer expects, there is negative uncertainty between expectations and perception, which leads to dissatisfaction (Keiningham, 2014).

2.6. Gaps in the Literature

Previous literature just focusses on service and goods industry for customer satisfaction, it is a little limit in technical company for customer satisfaction, the purpose is to re-confirm whether the customer satisfaction is also applying to technical company in HongKong. Related to this study, there is a causal relationship between customer satisfaction and service quality (accessibility, tangibility and security). Abstract Due to insufficient research on the relationship between service quality (accessibility, tangibility and security) and customer satisfaction with Alipay usage in HongKong, this study will investigate the quality of Alipay in a private company in HongKong to determine customer satisfaction (Anderson, 2016).

2.7. Conceptual Framework

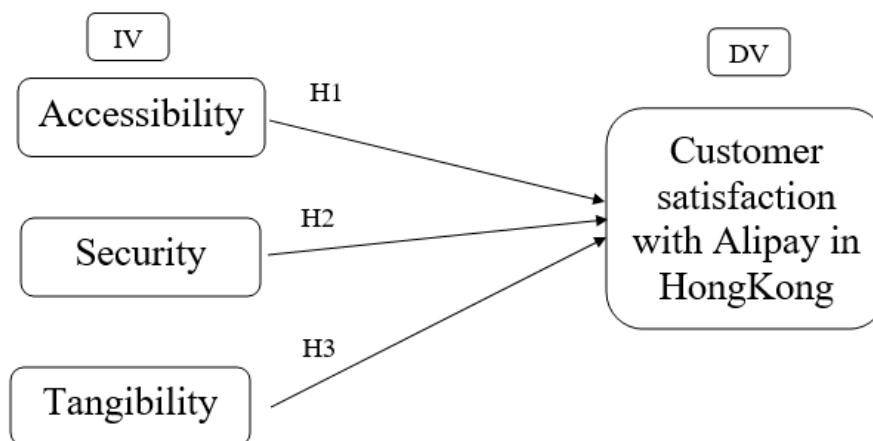


Figure 2. conceptual framework

2.8. Hypotheses

Hypothesis 1: accessibility has a significant influence on customer satisfaction with Alipay in HongKong

Hypothesis 2: security has a significant influence on customer satisfaction with Alipay in HongKong

Hypothesis 3: Tangibility has a significant influence on customer satisfaction with Alipay in HongKong

2.9. Conclusion

This study will consider the literature gaps of the Expectation-Uncertainty paradigm (EDP) in developing the framework of research as well as analysis to enhance the understanding of customer satisfaction with technical filed in HongKong. Since this is a correlational study which investigates the relationship between accessibility & security and customer satisfaction, the theory of Expectation-Uncertainty paradigm (EDP) is a suitable theory for study.

3. Research Analysis

3.1. Overview

The descriptive study design used in this study and its suitability will be discussed; Therefore, the purpose of this chapter is to explain the research design and sampling design, data collection, data testing, and analytical methods that will be used in this study. The sampling design will verify the sample size, technology, design and target population. In order to ensure that the questionnaire, analytical tools and system theory are suitable for this survey, method analysis and sampling techniques need to be checked.

3.2. Research Design

As defined by Mukesh, Salim and Ramayah (2013), Research design is a research action plan that illustrates methods for collecting measurement and analysis data. The main purpose of my research was to determine the relationship between accessibility/security and customer satisfaction with Alipay usage in HongKong (Barker, 2014). Through the method of quantitative research, the interval scale of the questionnaire was analyzed, and the raw data was analyzed use research method. The purpose of quantitative research is to create and apply hypotheses related to do analyze (Sekaran and Bougie, 2013). The study was conducted under non-contrived conditions to ensure minimal intervention by researchers at the time of all events to maintain the accuracy and independence of the study (Sekaran and Bougie, 2015). Based on the theory of regression analysis, the relationship between accessibility/security and customer satisfaction with Alipay was tested (Field, 2015).

3.3. Unit of Analysis

This research uses the individual for the unit of analysis level for customer satisfaction in Hong Kong, the individual is the case being studied as individual sample, and the individual is the main unit of analysis. (Zikmund et al., 2015) For this research, the research unit is a individual Alipay customer, it focus on determining the importance of accessibility/security and customer satisfaction (Field, 2013). This study needs to measure and draw conclusions from the customer's individual assessment of accessibility and security used by Alipay. The survey is being distributed to Alipay HongKong local customers to collect data within an extended period. The Sekaran and Bougie (2013) define that the data is only collected over a period of time because it is considered a cross-sectional study the data collected once only from respondents (Eric, 2014). The respondents did not repeat the test because the study only distributed the survey to the respondents, so this is a cross-sectional study (Brown, 2009).

3.4. Sampling Design

The population is use Alipay respondents in HongKong, Sampling involves selecting a small number of respondents from a larger population, so the group representative population and plays an important role in research because it helps to reduce the effort (Verma, 2012). Resources and difficulties involved in the research survey. HongKong has highly developed

economies country in the world, more and more people use the online or mobile payment in HongKong in recently, it is important to investigate the customer satisfaction with Alipay usage population (Brown, 2009).

3.4.1. Sampling Plan

The sampling plan is a detailed outline of when, at what time, what materials, what methods, and by whom. The design of the sampling plan should be such that the resulting data will contain a representative sample of parameters and allow for all problems (Tabachnick and Fidell, 2013). In this research, a non-probability sampling method will be used. The study was targeted at Alipay usage customers, including local HongKong people and in HongKong people. Due to the difficulty of random access samples, the samples of this study were selected based on their convenience (Eric, 2014).

3.4.2. Sampling Size

Base on Krejcie and Morgan (1970) calculation, for an estimated population size reach to 1400,000, the sample size should be 384 for this research, 400 questionnaires should be used online (Bryman and Bell, 2015).

3.5. Questionnaire Design

In this study, the questionnaire was designed using a questionnaire survey as table 3.5. All parts of the structured questionnaire are prepared and adopted by other journals and past research (Sekaran and Bougie, 2013). The first part of the questionnaire contains questions about demographics, there are three variables that refer to the type of customer (local people and tourism people), genders and educational level (Yadav, 2012). All questions except demographics are measured using the 5-point Likert scale, with strong disagreements starting with 1-5 (1) strongly agreeing (5) (Sekaran and Bougie, 2013).

The questionnaire will be drafted in English/Chinese and used in the literary commentary section. All questions should be simple, specific, clear and easy to understand for reliable and meaningful feedback. (Krosnick and Presser, 2010)

3.6. Pilot Test

the Pilot was defined test the appropriateness of the questionnaires conducted, trials must be conducted (Verma, 2012). In addition, pilot tests were used to reveal the current errors and deficiencies in the design of the questionnaire, and to help check the legitimacy and unwavering quality before guiding the full investigation (Verma, 2016).

3.6.1. Pilot Test: Factor Analysis

The 10% population sample from random sample size for pilot test, the questionnaire will be pre-tested in a small, convenient academic community (Yadav, 2016). These recommendations are primarily about the quality, layout and format of the questions, which will be considered to improve the questionnaire (Eric, 2014). Thereafter, the questionnaire will be pilot tested in a sample of students' conveniences, the focus will be on understanding the issues and the time to complete the questionnaire (Munro, 2015). The KMO Bartlett's test of sphericity should more than 0.6 significant, if not, it dedicates the research need increase the questionnaire, the factor of communalities more than 0.6, and the eigenvalues should follow IV number (Crouch and Housden, 2013).

3.6.2. Pilot Test: Reliability Test

Reliability testing is an important and reliable test to demonstrate its reliability and effectiveness (Field, 2016). Reliability is a measure of internal consistency. If a measurement of a concept does not change with repeated measurements, then this measurement is considered reliable (Munro, 2005). Although there are many types of tests to measure reliability, such as

test retest technology and multiple forms, etc. the Cronbach alpha should more than 0.7, it dedicates that the research is more reliable (Eric, 2016).

3.7. Measurements

Base on Kimberlin and Winetrstein (2008) research theory, measurement is the assignment of numbers to observations to quantify phenomena, including the manipulation of these constructs in defined variables, and the application of tools or tests, and the quantification of these variables (Kimberlin and Winetrstein, 2008). Test The key indicator of the quality of the measuring instrument is the reliability and effectiveness of the measuring instrument. When experimenting and testing measurement tools, it is best to consider the extension and effectiveness of the research value (Munro, 2005). The research uses the quantitative study requirements for statistical significance, it aim to find out the result for the research design (Zeithaml et al. 2013).

3.7.1. Descriptive Analysis

Descriptive research is a process involving data collection that can be quantitative or qualitative. The collection of quantitative information is arranged in a continuous digital form, just as the number of times a person chooses to use something or test a score (Crouch and Housden, 2013). The descriptive research is major analysis the demographic information, this study lists the frequency, percentage, effective percentage, and cumulative percentage that demonstrate its reliability (Eric, 2014).

3.7.2. Preliminary Analysis

The preliminary analysis is the significant for SPSS, the parametric and nonparametric methods is often based on preliminary goodness-of-fit tests. For the study, it aims to use preliminary method to select the detail analysis program, use parametric or nonparametric methods (Crouch and Housden, 2013).

For the Factor Analysis, some information obtained will be collected and executed under factor analysis to determine if the information needed and collected in the building can be used and is suitable for further testing. Sample perfection measurement (MSA) is a factor analysis step that should be extended froms 0 to 1 based on (Hair et al. 2007).

The Kaizer-Meyer-Olkin (KMO) test is important for measuring the ratio of variance between variables. KMO's test for sampling sufficiency can be counted between 0 and 1 (Munro, 2005). The KMO Bartlett's test of sphericity should more than 0.6 significant, if not, it dedicates the research need increase the questionnaire, the factor of communalities more than 0.6, and the eigenvalues should follow IV number (Munro, 2005).

Reliability is a measure of the stability or consistency of a test score. It is considered to be the ability to test or research findings, or any important result can be repeated, or must be searched more than once, and naturally repeated without Any change in results (Field, 2013). This means that investigators should be able to perform similar tests under the same conditions and get the same results. This reliability is important to enhance discovery and ensure that assumptions meet the needs and are accepted by many people (Eze et. al 2014).

3.7.3. Hypotheses Testing Analysis

In the study, each existing data requires a statistic. Therefore, hypothesis testing is an important process in statistics, and it evaluates two exclusive statements about the population to determine which statements are most supported by the sample data (Eze et. al 2012). Therefore, when the invention is statistically significant, it is the result of a hypothesis test. However, it is necessary to use exploratory factors, correlations, and alpha coefficients for initial data analysis to eliminate unnecessary items before performing hypothesis testing (Eze et. al 2012).

Multiple Regression analysis will be used in this study. In regression analysis, use one or more independent variables to predict the value of a result or dependent variable (Field, 2015).

Multiple regression involves forming a self-weighted estimation equation that derives a predictor of a dependent variable from multiple independent variables (Goldstein, 1986). Multiple regression helps determine the overall match of the relative contribution of each independent variable to the dependent variable (Krugman et.al, 2016).

Multiple associations are presented in the form of "R", which represents a measure of the quality of the prediction of the dependent variable; however, the value of R² is the coefficient of determination, that is, the ratio of the variance in the dependent variable can be explained by the independent variable (Sekaran and Bougie, 2016).

The ANOVA analysis table and a coefficient table. The model summary shows "how well the model matches the data." In the model summary, the "R-square" value represents the variance of the dependent variable, which is interpreted by independent variables or predictors (Munro, 2005). The F value in the ANOVA table and the corresponding meaning or p value indicate whether the model is suitable for the data, that is, is the model suitable? If the significance value is less than 0.05, then the model is significant and vice versa. The final output represented by the coefficient table (Field, 2013). The regression analysis is major used to study the relationship between accessibility/security and customer satisfaction with Alipay in HongKong. From the analysis, the highest influence factor on customer satisfaction will be determined (Juran, 2013).

3.8. Ethical Consideration

This study will consider ethical guidelines, especially those required by modern science. Procedures for contact with respondents will be presented in an ethical manner and respect the respondents without any prejudice (Munro, 2005). When the respondent's permission and the content of the questionnaire are carefully reviewed to avoid any sensitive or rude questions, the survey questions will be answered (Eze et. al 2012). Respondents will be informed of the purpose of the study, and data collected from respondents will only be used for this study (Juran, 2015). The questionnaire was confirmed to ensure that there were no other error messages other than the research topic. The researchers also ensured the confidentiality of the collected data, which will not be disclosed and utilized in the future without any consent (Gilbert, 2015). Participants were provided with confidence in accordance with the assurance procedures mentioned. Since the questionnaire was obtained from past research, it helps to improve internal validity, and external validity is also ethically satisfied (Seth, 2014).

3.9. Conclusion

In conclusion, this chapter introduces a research methodology that will be used to determine customer satisfaction of accessibility and security with Alipay usage in HongKong. There is Important issues such as population, unit analysis, sampling plan, data collection methods, questionnaire design, structural measurement, research design and data analysis. The purpose of this chapter is to understand and explain this study. Various data analysis methods will be applied according to the requirements of academic research and existing research results.

4. Research Finding

4.1. Overview

In this chapter, according to the method in the previous chapter, SPSS software is used for statistical data analysis, and the results are explained based on the results obtained. However, prior to the full collection of data, preliminary trials were conducted to ensure that the proposed questionnaire was appropriate and accurate for the study. As the chapter 3, Descriptive analysis, preliminary testing and hypothesis testing were subsequently carried out to further support the relevance of the study.

4.2. Pilot Test

A pilot to comprehensive data collection, pilots were conducted on a small scale, and a certain number of respondents were selected to investigate the feasibility of conducting the study on a larger basis (Verma, 2012). During the survey, 25 respondents were selected for pilot data collection, and factor analysis, reliability testing, and multi-collinearity testing were performed to determine the appearance and content validity of the data collected during the initial phase and whether it was appropriate. Twenty-five respondents who participated in the pilot test were conveniently selected but still reflected the population being studied

4.2.1. Factor Test

To determine whether the constructs of this study are relevant, we performed factor analysis and multicollinearity tests to measure whether all independent variables were related (Bougie and Sekaran, 2011). Factor analysis provides insight into whether a particular project or construct will be removed from subsequent data collection to enhance the effectiveness and suitability of the construct when the factor load for a particular factor is found to be below the required cutoff (Bougie and Sekaran, 2011).

Table 1. Communalities for Pilot Test

Communalities		
variable	Initial	Extraction
IV		
Easy to find and download for Alipay App	1.000	.672
Easy to do payment in shop or online use Alipay and link bank card with Alipay	1.000	.692
Alipay can support adequate bank card (no matter foreign bank) when do payment	1.000	.749
The Alipay App User friendly software and easy to operate	1.000	.745
working hours of Alipay service are adequate and in accordance	1.000	.698
Alipay has up - to - date software & technology	1.000	.816
Materials associated with the Alipay App (advertisement, information) are visually appealing at the Alipay App	1.000	.672
The Alipay employees was qualified by professional organization	1.000	.868
When you enter Alipay App, the Guide signs indicating as to which item are offering which services	1.000	.734
The Alipay App have a lot of practical functions	1.000	.946
Security for Alipay App and online filling	1.000	.924
Protection of Alipay transactions and keep each evidence	1.000	.860
Privacy / Confidentiality of the Alipay, especially personal information	1.000	.747
Every transaction can be traced in Alipay, bank account, E-mail and phone message.....	1.000	.808
The verification code is identified was security when do payment	1.000	.848
DV		
Are you satisfied with Alipay's products and services provided?	1.000	.910
Does the current service of Alipay meet your expectations?	1.000	.945
Would you like to recommend Alipay to your friends?	1.000	.912
Extraction Method: Principal Component Analysis.		

A factor load defined as the correlation between the variable and the factor extracted from the data; factors greater than 0.6 are considered relevant and suitable for further analysis According to Cooper & Schindler (2013). As can be seen from the above table, all of the extracted values have a load greater than 0.6, and many of them have a factor load greater than 0.7, so for the pilot test, these results indicate that these factors are considered to be suitable for the study.

Table 2. KMO and Bartlett’s Test for Pilot Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.853
	Approx. Chi-Square	5039.369
Bartlett's Test of Sphericity	df	105
	Sig.	.000

The KMO variation is 0.853, which exceeds 0.70, it indicates that the sample size is sufficient to continue the factor analysis. In addition, based on Bartlett's test, the approximate chi-square is 5039.368, the significance level is 0.000 (Sig.<0.05), so it indicates that the total sample size is sufficient to Continue factor analysis, which means that the structure and validity are appropriate for this study.

4.2.2. Reliability Test

Table 3. the reliability test for 4 variables

Variables		Cronbach's Alpha	Number of Items
Independent Variable	Accessibility	0.851	5
	Tangibility	0.757	5
	Security	0.870	5
Dependent Variable	Customer satisfaction	0.961	3
All Variables		0.867	18

As bland & Altman (1997) Cronbach’s Alpha reliability test value should be greater than 0.70 or above to ensure that the data has a high degree of internal consistency and is therefore considered relevant and appropriate for the final data collection. Internal consistency indicates that the pilot test respondents have a common understanding of the project. Base on Table 3 shows that Cronbach’s alpha of all variables value is greater than 0.8, also every variable is more than 0.7, so it indicates that the internal consistency of the scale is higher (for full respondents 280).

4.3. Descriptive Statistics / Demographics of Respondents

This study used a quantitative research methodology, and issued a questionnaire to respondents, distributed 400 questionnaires and collected 280 questionnaires, because some of questionnaires are not available; and also analyzed demographic information through IBM SPSS 22.

Table 4. Demographics descriptive analysis

Demographic Categories		Frequency	n=280 Percentage (%)
Age	18 – 25 years	161	40.36
	26 – 30 years	194	53.21
	31 – 40 years	24	5.357
	More than 40 years	5	1.071
Gender	Male	178	63.57
	Female	102	36.43
Do you currently live in HongKong	Yes	280	100
	No	0	0
Are you currently a customer of Alipay	Yes	280	100
	No	0	0
Type of customer	Business	89	31.79
	Employee	89	31.79
	Student	90	32.14
	Other	12	4.29
How often do you purchase beauty services?	Less than 1-year	56	20
	1-2 years	168	60
	2-3 years	43	15.36
	More than 3 years	13	4.46
what are the payment methods you often use	Alipay	56	22.5
	Credit card	168	37.14
	PayPal	43	32.5
	Other payment	13	7.86

The Table 4 show that according to the 280 valid samples, 178 (63.57%) were male and 102(36.43%) were female., but the number of man is significantly higher than that of female The difference between male and female is small; in terms of age, Age range of 18-25 years old occupy 40.36%, 26-30 years old occupy 53.21%, 31-40 years old occupy 5.357%, more than 40 years old occupy 1.071%. This shows that most of the participants’ age are 26-30 and 18-25years old. The most of participants’ are young ; in terms of nationality, all of the participants’ are come from HongKong or live in HongKong currently; and all of the participants’ are Alipay’s customer or understand Alipay platform and down load from internet, in terms of customer’s type, employees occupy 31.79%, business occupy 31.79, student occupy 32.14, which mean that most of participants’ are from employees, business and student, and almost occupy the same rate.

For the usage of Alipay, the less than 1 years occupy 20%, 1-2 years occupy 60%,2-3 years occupy 15.36%, more than 3 years occupy 4.46, which mean that most of participants were used Alipay between 1and 2 years. For the participants ‘frequency of Alipay usage, most of participants were used credit card and PayPal as 37.14% and 32.5 respectively, the Alipay occupy 22.5%, the other payment occupies 7.86%.

4.4. Multiple Regression Analysis

4.4.1. Hypotheses Testing Analysis

Hypotheses1

H1: Accessibility has a significant influence on customer satisfaction with Alipay in HongKong

Hypotheses2

H2: Security has a significant influence on customer satisfaction with Alipay in HongKong

Hypotheses2

H3: Tangibility has a significant influence on customer satisfaction with Alipay in HongKong

Table 5. Multiply regression

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.372 ^a	.239	.229	1.06124

a. Predictors: (Constant), Accessibility, Tangibility, security

b. Dependent Variable: customer satisfaction

Multivariate regression analysis can be defined the relationship between all independent samples Variables and customer satisfaction base on Sekaran & Bougie (2017). It can be seen from the model summary that Table 5 shows three independent variables (accessibility, tangibility and security) quality service and have an impact on customer satisfaction. The R value is 0.372, it indicates that a weak correlation was found between the three Independent variables and customer satisfaction. According to coefficient study, the R square is 0.239, and the adjusted R square is 0.229, which means that it has 23.9% relationship between three independent variables (accessibility, tangibility and security) and customer satisfaction, and then the R square and adjusted R square are almost equal, so, customer satisfaction will be regarded as consistent with the research results.

Table 6. ANOVA

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	50.047	3	16.682	14.813	.000 ^b
Residual	310.841	276	1.126		
Total	360.888	279			

a. Predictors: (Constant), Accessibility, Tangibility, security

b. Dependent Variable: customer satisfaction

Base on Table 6 ANOVA test result, the significant is 0.000, which mean the p-value is 0.000, and less than 0.05, it dedicates that the model is valid.

Table 7. Coefficients

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.202	.411		5.352	.000		
1 Accessibility	.556	.097	.400	5.415	.000	.636	1.573
Tangibility	.073	.112	.045	.650	.516	.657	1.523
Security	.692	.123	.426	5.616	.000	.543	1.840

a. Dependent Variable: customer satisfaction

The coefficients Table 7 shows Independent variables have most significant impact on customer satisfaction were defined by Beta and significant values (P-value). For the Tangibility P-value calculation, there is no significant correlation with customer satisfaction It is 0.516 and more than 0.05. Tangibility have no significant effect on multiple regression model. the research result indicate that the tangibility is not consider in customer, because the Alipay is high-technology company, the tangibility is not most considered for HongKong people.

Accessibility have positive significant with customer satisfaction because the P-value is 0.000, less than 0.005. Beta is 0.400. In HongKong, the accessibility is more useful to judge the customer satisfaction, the accessibility is one of the important item to come out the standard of customer satisfaction. People living in the city with fast rhythm, convenient and quick were very important things (Ghobadian, 2014). people don't want to spend a lot of time to do meaningless things, so that customer satisfaction is more important in the city of Hong Kong and can get more as people judge product quality the most direct way, Alipay is a useful payment platform that effectively responds to rising consumer expectations without charging consumers extra money (Ozdemir,2016).

Security have positive significant with customer satisfaction because the P-value is 0.000, less than 0.005. Beta is 0.426. which means that the security is more significant than accessibility impact on customer satisfaction because security Beta is 0.426, the accessibility Beta is 0.400, which mean the security has most impact on customer satisfaction in HongKong, people are caring about security when use Alipay to do online or mobile payment.

In overall, the equation of regression line $Y = 2.202 + 0.556$ (accessibility) $+ 0.073$ (tangibility) $+ 0.692$ (security)

Table 8: Summary of Research Hypotheses

Variable	Hypothesis	Result
Accessibility	H1 Accessibility has a significant influence on customer satisfaction with Alipay in HongKong	Supported
Security	H2 Security has a significant influence on customer satisfaction with Alipay in HongKong	Supported
Tangibility	H3 Tangibility has a significant influence on customer satisfaction with Alipay in HongKong	Reject

5. Conclusion and Recommendation

5.1. Findings and Discussions

Base on survey the majority of respondents often used the credit card for daily payment platform as 37.14%, the Alipay user just occupy 22.5%. this finding same as H2, according to Multiple regression analysis, the security has positive influence on customer satisfaction with Alipay in HongKong, which mean the security has most significant impact on customer satisfaction in HongKong(the Beta is higher), Hong Kong is a world economic city with a highly developed economic and financial system, and people cannot live or work without the Internet every day, making cyber security the most important issue (Camenisch, 2015). The recent development of electronic payments has led to a new type of payment Attack, highly aggressive invasive methods are on the rise Use, the middleman is a method that involves the type of attack Attackers break into an existing connection to intercept the exchanged data and injecting false information (Gruca, 2015).

For the Hypothesis H1, Accessibility has a positive significant influence on customer satisfaction with Alipay in HongKong. Combine H1 result with demographic age rank, according to the survey, the age range of most Alipay users are 18~25 and 26~30 years old as 93.57%, which mean the Alipay was popular with Hong Kong's young people. the accessibility is more useful to judge the customer satisfaction for young people, the accessibility is one of the important item to come out the standard of customer satisfaction. People living in the city with fast rhythm, convenient and quick were very important things, especially young people. people don't want to spend a lot of time to do meaningless things, so that customer satisfaction is more important in the city of Hong Kong and can get more as people judge product quality the most direct way, Alipay is a useful payment platform that effectively responds to rising consumer expectations without charging consumers extra money (Ozdemir, 2016). Chinese consumers have been engaged in e-commerce transactions since 2000, When online payment became possible, Alipay was used for online payment transactions in 2003, What online payment gives consumers is not just a new form of payment (Pikkarainen, 2016)

For Hypothesis H3, Tangibility has no significant influence on customer satisfaction with Alipay in HongKong, which mean the tangibility didn't imposed any positive influence on customer with Alipay in HongKong, in Hongkong The highly developed financial center in Hong Kong, young people in the choice of technology products very much, because it brings together the top businessmen and entrepreneurs from all walks of life, most of the European market, north American market, Asia Pacific market, choose to develop Hong Kong as a financial center, so to pay treasure to the market competition is very big, security and accessibility Alipay, committed to the development of investment, however, compared with the credit card in this piece of competitive advantage is obvious, so Hong Kong people don't care about tangibility of high and low, because he must meet the requirements of basic, For example (easy to use software, powerful functions, software update speed is fast...These are like PayPal, iPhone pay..., and so it can't reflect the value of accessibility.

5.2. Limitations of Study

This study explores the constructive contribution and essential relationship between accessibility, security, tangibility and customer satisfaction and customer revisiting willingness. However, these findings are still encountered to some limitations.

Firstly, there are many factors that influence customer satisfaction, and they can be changed. In addition to the two key factors discussed in this study, we encourage exploration of other variables in further research related to Hong Kong Alipay users. Such as brand and loyalty..., too many factors are influencing customer satisfaction, so hope the further research can analysis these other dimensions. And Enrich the research of this subject.

Secondly, Collecting Diversified Sample Size, Due to time and distance constraints, Hong Kong Commercial Street is a research participant. In future research, in order to cover a larger research scope, it is necessary to collect diverse samples. For further research, the investigator will focus on diverse samples and try to reach to different streets and CBD.

Thirdly, after regression analysis, the calculated R value is 0.37.2. If the R square value (0.239) is converted into a percentage, the relationship between the 3 independent variables and the tourist satisfaction degree is 23.9%. The relationship between the three independent variables (security, tangibility and accessibility) and visitor satisfaction is weak. Therefore, this study can draw on case studies of other future researchers, identify problems and further research and add more valuable data.

References

- [1] Anderson, (2016), "The antecedents and consequences of customer satisfaction for firms", Marketing Science.
- [2] Andreasen, (2017), "Customer loyalty and complex services", International Journal of Service Industry Management.
- [3] Bearden, (2017), "Selected determinants of consumer satisfaction and complaints reports", Journal of Marketing Research.
- [4] Brady, (2016), "Some new thoughts on conceptualizing perceived service quality: a hierarchical approach", Journal of Marketing.
- [5] Bilan, (2016). Sustainable development of a company: Building of new level relationship with the consumers of XXI. Century.
- [6] Belás,(2015). Bank customers satisfaction: case studies from Czech Republic. Actual problems of economics, No. 12(162), pp. 315–323.
- [7] Bryman, A. and Bell, E. (2015) Business Research Methods. 4th edn. New York: Oxford University Press.

- [8] Churchill, (2016), "An investigation into determinants of customer satisfaction", *Journal of Marketing Research*.
- [9] Camenisch, (2015) Jean-Marc Piveteau, Markus A. Stadler, *Security in Electronic Payment Systems*.
- [10] Ghobadian, (2014) "Service quality concepts and models", *International Journal of Quality*.
- [11] Gerrad, (2016), "Why consumers are not using internet banking: a qualitative study", *Journal of Service Marketing*.
- [12] Chellappa, R. K. (2014) customer's trust in electronic commerce transactions, the role of perceived privacy and perceived security. Emory University, Atlanta.
- [13] Goyal, (2014), *Mobile Banking in India: Practices, Challenges and Security Issues*.
- [14] Reichheld, (2016), "Zero defections: quality comes to services", *Harvard Business Review*.
- [15] Rust, (2014), "Service quality: insights and managerial implications from the frontier", in Rust, R. T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage Publications.
- [16] Schellhase, (2015), "Customer satisfaction in business-to-business marketing: the case of retail organisations and their suppliers", *Journal of Business & Industrial Marketing*.
- [17] Cheng, (2014) factors influencing customer satisfaction and E-loyalty: *Journal of online shopping environment among the young adults*.
- [18] Manrai, (2017), "A field study of customers' switching behavior for bank services", *Journal of Retailing and Consumer Service*.
- [19] Niranjnamurthy, (2013), The study of E-Commerce Security Issues and Solutions, *International Journal of Advanced Research in Computer and Communication Engineering* Vol. 2, Issue 7, July 2013. Retrieved 22 apr. from [http://www.ijarcce.com/Upload/2013/july/69-o Niranjnamurthy%20The%20study%20of%20ECommerce%20Security%20Issues%20and%20Solutions .pdf](http://www.ijarcce.com/Upload/2013/july/69-o%20Niranjanamurthy%20The%20study%20of%20ECommerce%20Security%20Issues%20and%20Solutions.pdf).
- [20] Ondiege, P. (2014). Mobile banking in Africa: Taking the bank to the people. *Article in Africa Economic Brief*, 1(8).
- [21] Zhihu(2015). Why Alipay can't popular in Europe. [online] available at <<https://www.zhihu.com/question/37801432>>[accessed 4.Apr].
- [22] Villers. V (2012). Banking will mean digital banking in 2015. Retrieved [February 3, 2015].from <http://www.pwc.lu/en/pressarticles/2012/banking-will-mean-digital-banking-in-2015.jhtml>.
- [23] Oliver, L. R. (1997). *Satisfaction a behavioral perspective on the consumer*, The McGraw-Hill Companies, Inc. New York.
- [24] Oliver. R. L. (1980). A Cognitive Model of the Antecedents of Satisfaction Decisions, *Journal of Marketing Research*, 17, 46-49.
- [25] Ozdemir, (2016), "Exploring the adoption of a service innovation: a study of internet banking adopters and non-adopters", *Journal of Financial Services Marketing*.
- [26] Pikkarainen, (2016), "The measurement of end-user computing satisfaction of online banking services: empirical evidence from Finland", *International Journal of Bank Marketing*.
- [27] Fornell, C. (2014). A national customer satisfaction barometer:: The Swedish experience. *J. Marketing* 55(January) 1-21.
- [28] Field, A. (2013) *Discovering Statistics Using IBM SPSS Statistics*. London: SAGE Publications.
- [29] Seth, (2014), "Service quality models: a review", *International Journal of Quality & Reliability Management*.
- [30] Stavins, J (2017). "Security of Retail Payments: The New Strategic Objective." Federal Reserve Bank of Boston Public Policy Discussion Paper No. 13-9, 2013. Accessed November 30, 2015. <http://www.bostonfed.org/economic/ppdp/2013/ppdp1309.htm>.
- [31] M. Vrîncianu, (2017), Consideration Regarding the Security and Protection of E-Banking Services Consumers' Interests, *Academy of Economic Studies*, 2010, Bucharest, Romania. Retrieved 27 apr. 2015 from <http://core.ac.uk/download/pdf/6492899.pdf>.
- [32] Wang, (2015), "Determinants of user acceptance of internet banking: an empirical study", *International Journal of Service Industry Management*.

- [33] Wei, (2006), "The effects of customer service management on business performance in Malaysian banking industry: an empirical analysis", *Asia Pacific Journal of Marketing and Logistics*.
- [34] Zong (2016). The security problem of Alipay. [online] available at <https://wenku.baidu.com/view/5443549ebdeb19e8b8f67c1cfad6195f312be8ff.html> [accessed 2. Apr].
- [35] Gruca, (2015), "Customer Satisfaction, Cash Flow, and Shareholder Value," *Journal of Marketing*, 69 (July), 115–30.
- [36] Gupta, Lehmann, and Stuart (2014), "Valuing Customers," *Journal of Marketing Research*, 41 (February), 7–18.
- [37] Guo, (2014). Evaluating factors influencing customer satisfaction Towards online shopping in China. *Asian Social Science*, 8(13),40---50.
- [38] Heskett, Sasser and Schlesinger (2014), *The Service Profit Chain*. New York: The Free Press. Iacobucci, Dawn (2008), *Mediation Analysis*. Thousand Oaks, CA: Sage Publications.
- [39] Ittner, Christopher and Larcker (2015), "Are Nonfinancial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction," *Journal of Accounting Research*, 36 (Suppl.), 1–35.
- [40] Taylor, (2017), "The Stock Market's Pricing of Customer Satisfaction," *Marketing Science*, 28 (5), 826–35.
- [41] Ivanov, Kissan, and Babajide (2013), "Disentangling the Market Value of Customer Satisfaction: Evidence from Market Reaction to the Unanticipated Component of ACSI Announcements," *International Journal of Research in Marketing*, 30 (2), 168–78.
- [42] Jacobson, Robert and Natalie Mizik (2016), "The Financial Markets and Customer Satisfaction: Reexamining Possible Financial Market Mispricing of Customer Satisfaction," *Marketing Science*, 28 (September/October), 810–19.
- [43] Jacobson, Robert and Natalie Mizik (2014), "The Financial Markets and Customer Satisfaction: Reexamining Possible Financial Market Mispricing of Customer Satisfaction," *Marketing Science*, 28 (September/October), 810–19.
- [44] Keiningham, (2015), "A Longitudinal Examination of Net Promoter and Firm Revenue Growth," *Journal of Marketing*, 71 (July), 39–51.
- [45] Klein, Katherine J. and Kozlowski (2014), *Multilevel Theory, Research, and Methods in Organizations*. San Francisco: Jossey-Bass, pp. 349–81.
- [46] Kozlowski, (2016), "A Disagreement About Within-Group Agreement: Disentangling Issues of Consistency Versus Consensus," *Journal of Applied Psychology*, 77 (2), 161–67.
- [47] Kumar, and Shah (2014), "Expanding the Role of Marketing: From Customer Equity to Market Capitalization," *Journal of Marketing*, 73 (November), 119–36.
- [48] Lariv`ere, (2015), "Linking Perceptual and Behavioral Customer Metrics to Multiperiod Customer Profitability: A Comprehensive Service-Profit Chain Application," *Journal of Service Research*, 11 (1), 3–21.
- [49] Rust, Lemon, and Zeithaml (2014), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, 68 (January), 109–27.
- [50] Zahorik (2015), "Customer Satisfaction, Customer Retention and Market Share," *Journal of Retailing*, 69 (2), 193–215.
- [51] Keiningham (2014), "Return on Quality (ROQ): Making Service Quality Financially Accountable," *Journal of Marketing*, 59 (April), 58–70.
- [52] Schulze, Skiera and Wiesel (2014), "Linking Customer and Financial Metrics to Shareholder Value: The Leverage Effect in Customer-Based Valuation," *Journal of Marketing*, 76 (March), 17–32.
- [53] Tuli, (2015), "Customer Satisfaction and Stock Returns Risk," *Journal of Marketing*, 73 (November), 184–97.
- [54] Kombo, (2015). Customer satisfaction in the Kenyan banking industry, *Journal of International Studies*, Vol. 8, No 2, 2015, pp. 174–186. DOI: 10.14254/2071-8330.2015/8-2/15.

- [55] Koskosas, (2015). E-banking security: A communication perspective in Risk management. Palgrave Macmillan, Vol. 13, pp. 81–99.
- [56] Kruck, (2014). Protecting personal privacy on the internet, Information Management & Computer Security, Vol. 10, No. 2, pp. 77–84.
- [57] Marimon, (2014). Impact of e-Quality and service recovery on loyalty: A study of e-banking in Spain, Total Quality Management, 23(7): 769–787.
- [58] Murugiah, (2017). Study of Customer Satisfaction in the Banking Sector in Libya, Journal of Economics, Business and Management, Vol. 3, No. 7 pp. 674–677.
- [59] Nochai and Nochai (2013). The impact of Internet Banking Service on Customer Satisfaction on Thailand: A Case Study in Bangkok. International Journal of Humanities and Management Sciences, 10(1): 2320–2344.
- [60] Sekaran, U. and Bougie, R. (2016). Research Methods for Business: A Skill Building Approach Seventh Edition. John Wiley & Sons.
- [61] Tabachnick, B. G & Fidelli, L.S (2007) Using Multivariate Statistics. Pearson.
- [62] Sekaran, U. and Bougie, R. (2015) Research methods for business: A skill-building approach. New Jersey: Prentice Hall.
- [63] Zikmund, W.G., Babin, B.J., Carr, J.C. and Griffin M. (2013) Business Research Method. 9th Edition. Florida: Thomson South-Western.
- [64] Brown, J. D. (2000) Using surveys in language programs. New York: Cambridge University Press.
- [65] Ahire. S.L, Dreyfus, (2000) "The impact of design management and process management on quality: An empirical investigation", J. Oper. Manage., vol. 18, pp. 549-575.
- [66] Ahire.S.L, Golhar,(1996) M. A. Waller, "Development and validation of TQM implementation constructs", Decision Sci., vol. 27, no. 1, pp. 23-56.
- [67] Anderson, D. W. Gerbing (2014), "Structural equation modeling in practice: A review and recommended two step approach", Psych. Bull., vol. 103, pp. 411-423.
- [68] Anderson, M. Rungtusanatham, R. G. Schroeder (2014), "A theory of quality management underlying the Deming management method", Acad. Manage. Rev., vol. 19, no. 3, pp. 472-509.
- [69] Anderson, M. Rungtusanatham, R. G. Schroeder, S. Devaraj, (1996) "Path analytic model of a theory of quality management underlying the Deming management method: Preliminary empirical findings", Decision Sci., vol. 26, no. 5, pp. 637-658.
- [70] Barker, (2016), "Quality engineering by design: Taguchi's philosophy", Qual. Prog., vol. 19, no. 12, pp. 32-42.
- [71] Baumgartner, C. Homburg(2014), "Application of structural equation modeling in marketing and consumer research: A review", Int. J. Res. Market., vol. 13, pp. 139-161, 1996. K. Beasley, Total Quality Management in the Electronics Industry: A User's and Supplier's Guide, U.K., Hertfordshire: Technical Communications.
- [72] Bergman, (2015) Quality from Customer Needs to Customer Satisfaction, New York: McGraw-Hill, 2015.
- [73] Black, L. J. Porter, (1996) "Identification of the critical factors of TQM", Decision Sci., vol. 27, no. 1, pp. 1-21, 1996.
- [74] Bounds, L. Yorks, M. Adams, G. Ranney,(2013) Beyond the Total Quality Management toward the Emerging Paradigm, New York: McGraw-Hill.
- [75] Rungtusanatham,(2014) "Comparison of quality management practices: Across the supply chain and industries", J. Supply Chain Manage., vol. 35, no. 1, pp. 20-27.
- [76] Churchill, G. A (2014) Marketing Research: Methodological Foundations, IL, Chicago: Dryden, 1987.
- [77] Cimento, (2104) "The high-productivity electronics company", McKinsey Quart., no. 1, pp. 21-32.
- [78] Crouch, S. and Housden, M. (2013) Marketing Research for Managers. Oxford.