

# Determinants Of Customer Satisfaction And Customer Loyalty In E-Banking: A Case Study of Thailand's Selected Commercial Banks in Bangkok's Central Business Area

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## Abstract

The primary purpose of this paper is to identify the determinants of the factors influencing customer satisfaction and customer loyalty in the e-banking of commercial banks of Thailand. A 33 item questionnaire was developed based on the literature review and tested for reliability and validity using Cronbach's alpha test. A total of 400 questionnaires were distributed to 204 e-banking banking preferring clients and 196 traditional banking preferring clients. The regression analysis suggested that core service quality, social benefits, confidence benefits and physical layout has statistical influence on customer satisfaction of commercial banks. Moreover, accessibility and special treatment benefits have statistical correlation with customer satisfaction. The findings also revealed that there was statistical difference in customer satisfaction and customer loyalty in e-banking and traditional banking preferring clients. In the intense competitive banking industry of Thailand, the identified results help the decision makers of the banks to improve the special parameters and get an edge against the competitive banks to satisfy and retain customers.

**Key Words:** Customer satisfaction, Customer loyalty, Traditional banking, E-banking Banking, Thai Commercial Bank

## Introduction

At the present context, financial institutions are facing mature and intense competition and the financial service providers are focusing their effort on creating and retaining a pool of satisfied and loyal customers. Lovelock, Patterson and Richard (2004) stressed that in order to achieve long term customer satisfaction and retention, the company needs to design and deliver services that could satisfy customer and provide them a wonderful experience during encounter of the services. Every business in today's world has been significantly affected by customer satisfaction and customer retention. Banking industry is not an exception. Building a long term good relationship with customers and also retaining them is a critical strategy for any financial institution to remain profitable. Several empirical studies including Colgate and Lang (2001)

concluded that there is positive correlation between consumer loyalty and banks profitability.

Al-hawari (2014) noted that traditional service oriented concept in banking is outdated due to the intense competition among the industry. With regard to the product or services, the industry needs to focus more on the customer oriented industry. Clemes, Gan and Zhang (2010) stated that customer satisfaction and customer retention have more impact on service oriented industry like banks, restaurants and hair salons. Several empirical studies including Colgate and Lang (2001) concluded that there is positive correlation between customer satisfaction, consumer loyalty and banks profitability. Reichheld and Saser (1990) concluded that increasing customer retention rate by 5% increased the bank's profit by 85%. Anderson and Sullivan (1993) also stressed that there are strong linkages between quality service dimensions and overall customer satisfaction.

In the past, banking industry was an oligopoly industry where few banks provided the services and customers were forced to have business with them whether they liked the services or not. Porter (1998) described this phenomenon as low customer bargaining power. Moreover, Athanassopoulos, Gounaris and Stathakopoulos (2001) founded that interest rates used to be the major factor for choosing the banks but the scenario is different today as due to financial regulation from the central bank; all the interest rates are more or less similar.

Timothy (2012) states that 30 or 40 years ago, the banking industry was a simple oligopoly industry where few banks provided the services and banks were solely used for deposit and lending purposes. The bank clients and the service provider had to be physically present in the physical bank for the transactions. This banking is known as traditional banking. With the development of information and communication technology, banking business has integrated arrays of services along with automated software driven service providers who along with the traditional banking. This was the birth of e-banking. Electronic or e-banking is service rendered by the bank and financial institution where clients and the service provider engage into financial transactions via electronic channel and payment systems. The first Automated Teller Machine (ATM) machine was installed in US by Chemical Bank at New York in September 2, 1969 A.D. Electronic banking then started to improve and banks provided arrays of services including debit cards, credit cards, visa cards, web banking, mobile banking etc.

Electronic cards, web and mobile banking through all are part of electronic banking but they are different. Electronic cards use banking intranet services where the transactions are routed through either card issuing banks or other banks card reading machines (ATMs, CDMs or POS terminals) that in turn communicates with an integrated gateway and switch of that bank. The transaction then via card intranet network get routed to the card issuing banks where it gets authorized (3DS verification) and the transaction is completed. Net banking in other hand uses internet (4G/3G/GPRS/LAN) where the merchant and the payment partner (aggregators) directly connect and communicate with the net banking partner through server-server calling and the fund transaction gets settled with the merchants bank at the end of the day for all transactions happening in that day. Last step is OTP/IVR authorization. Net banking via website is called web banking and through mobile applications is called mobile banking.

Banking business has integrated arrays of services with automated software driven service providers who along with the traditional banking where customers walk in physically in the bank branches; clients use electronic devices like CDM, ATM, online based web and mobile services. Now a days, a modern banking clients use both traditional and electronic version of bank services. Though, these clients either prefer one. Use of electronic devices such as ATMs, CDMs and use of electronic cards, websites and mobile application for utility payments, inter and intra bank payments and bill payments has increased. However, services such as international money transfer, foreign exchange, exchange of traveler's cheques, loan process, bank drafts etc. are partially or fully done via traditional banking. Moreover, some clients who are not used to technical knowhow still prefer traditional banking. The challenge of bank industry has grown as the customer satisfaction and customer loyalty for traditional banking preferring clients and e-banking preferring clients are different.

For any industry, losing existing customer is a serious problem not only in terms of current profitability but also the future earnings. Lovelock *et al.* (2004) explain that it is 5 times more costly to acquire new customer than retaining the existing customers in financial sector. The reason for these may be many. Athanassopoulos *et al.* (2001) founded that few reasons such as extra cost incurred in advertisement and promotional, administration and operation. Thus, customer satisfaction and loyalty is a burning issue in any industry including financial sector.

According to Bank of Thailand (2016), there are 22 commercial banks with 2169 branches over Bangkok and 7060 all around Thailand. According to Bank of Thailand (2016), e-banking was initiated by Siam Commercial Bank PLC.in 1999 A.D which also happens to be first commercial bank of Thailand. The central bank of Thailand i.e. Bank of Thailand is responsible for laying the financial infrastructure and requirements of all commercial banks indispensable for electronic transactions. The following table shows the shows the statistics regarding electronic banking in Thailand.

Table 1

*Statistics regarding electronic banking in Thailand*

Particulars	2015	2014
Number of agreements <sup>1</sup> for net and mobile banking	24,465,925	23,598,048
Total number of ATMs, CDMs	61,817	56,851 <sup>1</sup>
Total Number of ATM cards	24,401,333	24,101,957
Total Number of credit cards	20,303,751	18,626,864
Number of EFTPOS <sup>2</sup> terminals	338,485	311,289

1. Agreements are the application for the online accounts
2. EFTPOS (Electronic fund transfer at point of sale)

*Source: Bank of Thailand. (2015). Payment Systems Report. Bangkok: Bank of Thailand.*

Electronic banking is booming in Thailand and especially in capital city Bangkok, e-banking is used extensively especially in the central business areas. With the intense competition among different commercial banks, retaining customers and keeping them loyal is a key issue for the banks as losing clients means bleeding profits. With the increased exposure of internet and hand held devices in Thailand, e-banking and mobile banking has been booming. Thus, it is crucial to understand the satisfaction and loyalty of clients preferring both traditional and e-banking.

## Literature Review

### Service Quality of Bank

Oyeniya and Abiodun (2010) defined service quality as assessment of how well a delivered service confirms the client's expectations. According to Gronroos (2000), service is defined as intangible offerings which are produced and consumed simultaneously at the same period. The interaction between the service provider and the consumer renders the services to customers. Driver and Johnson (2001) explained that the interaction of service provider and the customer establish an opportunity for the customers to analyze and evaluate the quality of the services. Aydin, Ozer and Arasil (2005) conceptualized service quality as the customer's overall assessment of the relative superiority or inferiority of the service and the service providers. Past empirical researches have shown that service quality is a multi-dimensional construct and it varied from organization to organization. Kamalia and Jacques (2000) noted that in the banking organization the dissatisfaction of the customers arises from the perceived service of the bank and the actual service provided by the bank. Avkiran (1994) has identified four dimensions of the service quality in banks. They are: Functionality, credibility, communication and access to teller services.

### Social Benefits to Customer

Spake and Megehee (2010) defined social benefits as interpersonal relationships between the customer and the service provider ensuring mutual, long-term relationships and benefits for both parties. Spake and Megehee (2010) further adds that, social benefits make customers feel they are an important part of the business while on the other hand service providers benefit by the decrease in cost of serving customers resulting in an increase in profits, an increase in positive word-of-mouth referrals and also establishing a key switching barrier for the customers. Gwinner, Gremler and Bitner (1998) further added that social benefits impose as key factors for customer retention in any organization. Sweeney (2002) verified that social benefits play a key part in the service industry. As the service industry is kindly based on the interaction of customer and service provider, customer satisfaction and repurchase intention is largely based on the social benefits between the customer and the service provider. Ruiz-Molina, Gil-Saura and Berenguer-Contró (2009) concluded that social benefits varied from one industry to another but they too agreed on the fact that social benefits were one of the primary switching barriers.

## Confidence benefits

Ruiz-Molina *et al.*(2009) described the confidence benefits as the psychological factors associated with the feeling of security, trust, reduced anxiety in the current service providers. Sheth and Parvatiyar (1995) related confidence benefits with the familiarity, friendship, social support and interpersonal recognition. Especially in banking business where money is involved, confidence very necessary. Client has to be confident that their electronic transaction and virtual bank is fully secure and there are different layers of security which will protect their money. Kaur, Sharma and Mahajan (2011) associated trust and reputation with the confidence benefits. Hennig –Thurau, Gwinner and Gremler (2002) identified confidence benefit as one of the factors that contributes to the customer switching banks in the financial market. Butscher (2002) suggested that banks confidence benefits is one of the key decision making criteria for the bank selection by the customers. De Wulf, Odekerken-Schro and Kenhove (2003) noted that confidence benefits can strengthen trust of the customer while lack of confidence can increase the probability of switching behavior.

## Physical Layout

Nguyen and Leblanc (2002) defined physical layout as the packaging of services that has three components ambient conditions, spatial layout and décor and orientation signals. It is not necessary that physical layout shape a brand image but the service scope of hospitality had a much impact on customer revisit and brand image of restaurant through attractive design and decoration, attractive background, music and sound, visual appearance of websites, application and machineries. It is a dynamic driver which includes a social dimension and customers are regarded as active creators of their own experience.

## Special treatment benefits

Yen and Gwinner (2003) confirmed that in service oriented business, creating a good relation with clients and making customer feel special is one of the critical strategies to create a switching barrier and satisfy the customers. In context of e-banking, special treatment benefits includes personalization of the web interface, easy access and the suggestion of the bank services as per the preference and usage of the user. Relational benefit in long run creates the desired outcome of any organization i.e. customer loyalty.

Special treatment like proper acknowledgement of the transaction problem by the bank and the speedy recovery or the solution of the problem can make customers feel they are important to the banks. Gwinner *et al* (1998) have concluded that special treatment benefits has strong positive and significant relationship with customer loyalty.

#### Accessibility

Accessibility is the convenient exposure and the reach of the product, service, information, devices or environment whenever they are required. Gupta and Dev (2012), Jamal and Naser (2003) and Molina, Consuegra and Esteban (2007) have linked the bank service accessibility with the customer satisfaction and loyalty in their respective papers. Strategic location of the branches, ATMs, CDMs, reliable and efficient access of the webpage or mobile application now a days are necessity for every bank. Accessibility helps to enforce the idea of providing efficient service to the clients and thus they are very significant factor to influence the customer satisfaction and customer loyalty.

#### Customer Satisfaction

According to Churchil and Surprenant (1982), customer satisfaction is an output, resulting from the customer's pre-purchase comparison of expected performance with perceived actual performance and incurred cost. Pieter and Willem (1990) defined customer satisfaction as an output of purchase and consumption, resulting from a buyer's analysis of the benefits and costs of the purchase in relation to the perceived consequences. Huiqun and Zhao (2011) defined customer satisfaction as a post consumption judgment regarding a specific product or service. They further justify that it is the result of a judgmental process that differentiates pre-purchase perceptions and expectations with actual of performance during and after the consumption. Aydin and Ozer (2005) noted that a customer will be satisfied and continue using product or service if the difference between reward and cost is favorable. Pieter and Willem (1990) further added that satisfaction is a new standard for measuring the business performance and also a new dimension of concept to help organization maximize their performance potential.

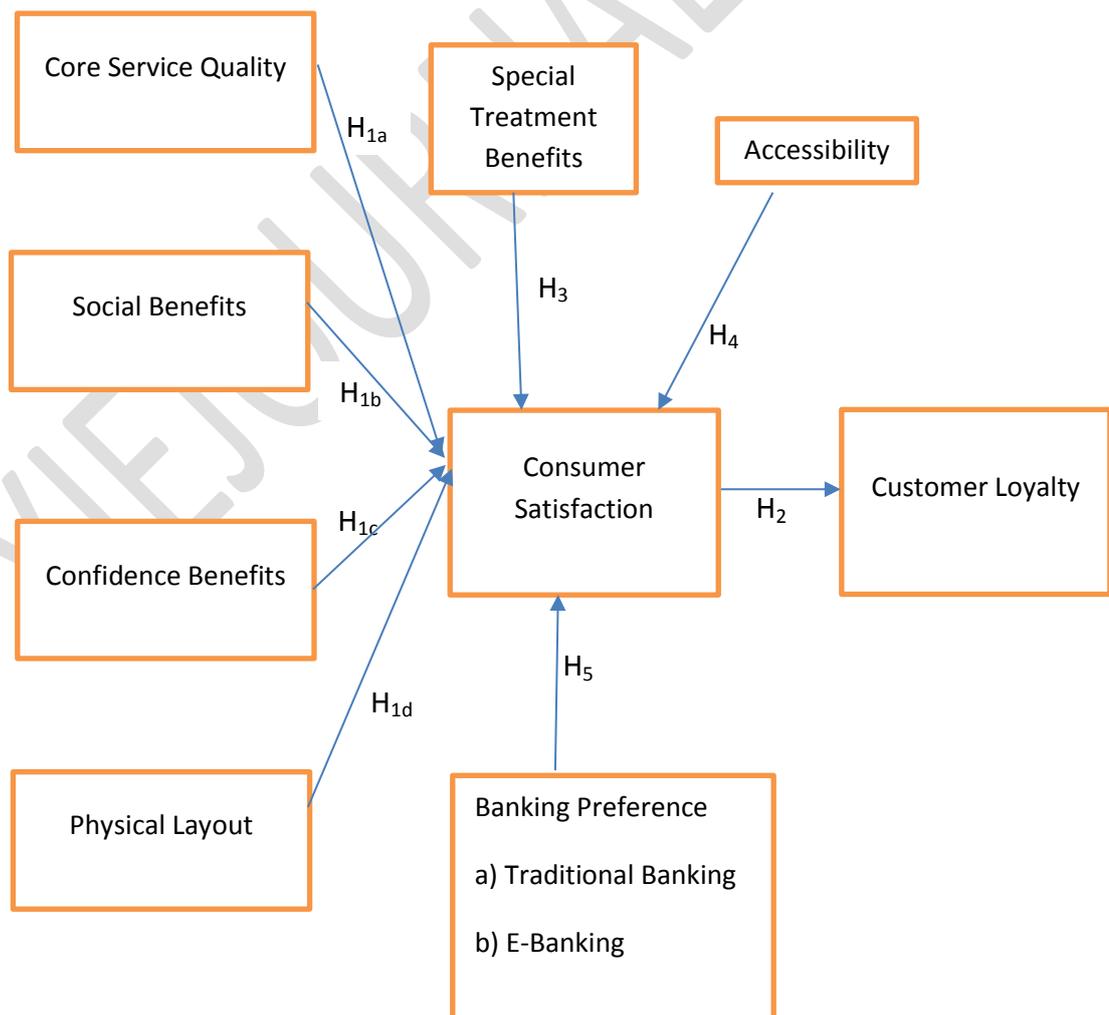
#### Customer Loyalty

Clemes, Gan and Zhang (2010) describes customer loyalty as the result of consistently positive emotional experience, physical attribute-based satisfaction and perceived value of an experience, which includes the product or services. Al-hawari

(2014) defined customer loyalty as the degree to which customer shows repurchase behavior for specific products or services. Li and Green (2011) argued that loyalty is key driver for the financial success especially in present volatile economy. Oliver (1997) developed a comprehensive model of customer loyalty where there are 4 sequence levels. They are cognitive loyalty, affective loyalty, conative loyalty and action loyalty. Dick and Basu (1994) noted that customer loyalty includes both behavior and the psychological aspects. Uncles, Dowling and Hammond (2003) noted that loyal customers are best brand ambassadors of the company as they help to spread positive word of mouth. Although, many empirical research associated customer loyalty with satisfaction, Al-hawari (2014) argued that switching barriers also influence the loyalty. Ranaweera and Prabhu (2003) stated that customer loyalty is a crucial switching barrier for the customers.

### Conceptual Framework

Based on the literature review, the following conceptual framework has been designed for the study



As depicted in the conceptual framework, the research study examines six hypothesis

H1<sub>a</sub>: Core service quality of bank explains unique variance for customer satisfaction of the bank.

H1<sub>b</sub>: Social benefits to the customers explains unique variance customer satisfaction of the bank.

H1<sub>c</sub>: Confidence benefits to the customers explains unique variance for customer satisfaction of the bank.

H1<sub>d</sub>: Physical layout of bank explains unique variance for customer satisfaction of the bank.

H2: There is significant statistical relation between consumer satisfaction and customer loyalty.

H3: There is significant statistical relation between special treatment benefits and customer satisfaction.

H4: There is significant statistical relationship between accessibility and customer satisfaction.

H5: There is statistically significant mean difference between customer satisfaction and banking preference customer.

### **Research Methodology**

A quantitative approach was used in this study to investigate the hypotheses. Accidental or convenience sampling method was used to collect the data. Since, the researcher focused on the central business area of Bangkok; Pathumwan, Silom and Sukumvit area were sample area. These areas were taken as business areas as most of the corporate and business units are concentrated in these areas. The Likert scale model was used in the surveys questionnaire. The Likert model was developed to measure attitude on a 7-point scale ranging from 1 which was 'strongly disagree' to 7 which was 'strongly

agree'. There were three statistical analyses conducted to test hypotheses. First, regression analysis was utilized in order to identify relationship between independent and dependent variable by linear equation (H1<sub>a</sub>, H1<sub>b</sub>, H1<sub>c</sub>, and H1<sub>d</sub>). Pearson correlation analysis was used to determine the strength of association between two variables. (H2, H3, H4). Moreover, Independent Sample T-test was conducted to test mean difference between homogeneous group and dependent variable (H5).

#### Measurement of variable

The target respondents for this survey were clients of commercial banks from the central business area of Bangkok, Thailand who were familiar with e-banking however preferred either traditional or e-banking.

#### Population and Sample

Accidental or purposive sampling method was used to distribute the questionnaire to the banking clients in central business area of Bangkok and data was collected from 400 respondents.

#### Reliability Test

The test is done when the target number of respondents reached 30, which was conduct by Cronbach's Alpha Coefficient. Typically, the reliability result has to be greater than 0.6 in order to meet with the typical prerequisites of reliability of research instrument.

Table 2

*Consistency of the scales test*

<b>Variables</b>	<b>No of Items</b>	<b>Cronbach's Alpha</b>
Core service quality (CSQ)	9	0.893
Social benefits (SB)	3	0.650
Confidence benefits (CB)	3	0.717
Physical Layout (PL)	5	0.836
Accessibility (A)	3	0.704
Special treatment benefits (STB)	4	0.704
Customer satisfaction (CS)	3	0.863
Customer Loyalty (CL)	3	0.715

## **Results and Discussion**

### Data Analysis

GNU PSPP version 0.10.1-g1082b8, a window based open source statistical analyzing tool was employed to analyze the results. All the necessary data collected were summarized and analyzed in a readable way and easily interpretable way using PSPP.

### Descriptive Analysis

Descriptive analysis was used to analyze the basic characteristics of the 400 respondents collected. The majority of the respondents were female with 55% (220 respondents) while male respondents were 45% (180 respondents). Majority of the respondents preferred e-banking with 51% (204 respondents) while respondents with traditional banking preference were 49% (196 respondents). The highest age group of the respondents was between age groups 31-40 years old with 38.5% (154 respondents). There were 34.75%

of respondents who were between age group of 21-30 years (139) and 11.5% of respondents between age group of 41-50 years (46 years). There was 10.25% of respondents of age group 50 and above (41 respondents) while just 5% of respondents between age group 20 years and below (20 respondent). 36% (143) of the total respondents earned between 30,000-40,000 Baht a month. Similarly, the respondents who earned between 20,000-30000 Baht a month were 22% (87 respondents). The respondents with more than 50,000 Baht a month income a month were 17% (69 respondents). The respondents with income 40,000-50000 Baht a month were 14% (56 respondents). Finally, the respondents with less than 20,000 Baht a month income were 11% (45 respondents). The majority of the respondent group were the private employee with 31% (124 respondents). The second largest group of respondent were students with 25.5% (102 respondents). There were 15.5% of respondents belonging to management group. (62 respondents).14% of respondents were self-employed (56 respondents). Finally, 7.5% of respondents did miscellaneous jobs. (30 respondents).

Table 3

*Descriptive analysis and Correlation Matrix*

<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>CSQ</b>	<b>STB</b>	<b>SB</b>	<b>CB</b>	<b>PE</b>	<b>A</b>
CSQ	5.7317	.81849	1					
STB	4.8458	1.30627	0.508**	1				
SB	5.4825	.98612	0.576**	0.372**	1			
CB	5.6508	1.06593	0.171**	0.146**	0.205**	1		
PL	4.8880	1.36202	0.216**	0.517**	0.47**	0.217**	1	
A	4.8458	1.30627	0.211*	0.7**	0.375**	0.172**	0.517**	1
**Correlation is significant at the 0.01 level (One-Tailed)								

Comparing overall mean of the factors in the table 2, the highest mean belongs to the core service quality with 5.73 while lowest mean belongs to the special treatment benefits and accessibility with 4.8458. Therefore, factors including special treatment, tangibles and accessibility are considered important while core service quality, social benefits and confidence benefits are considered fairly important factors influencing customer satisfaction and customer loyalty.

The correlation matrix indicated that four sets of variables has medium positive correlation as their correlation coefficient exceeds 0.5. Thus, there are medium positive correlation between Special treatment benefits and Core service quality (0.508), social benefit and core service quality (0.576), Physical Environment and Special treatment benefits (0.517) and finally Accessibility and Physical environment (0.517).

### Inferential Analysis

Table 3

*Result of regression analysis*

<b>Variable</b>	<b>Model 1</b>	<b>VIF</b>
Constant	-2.309 (0.385)	
Core Service Quality	0.296 (0.069)	1.513
Social Benefits	0.120 (0.053)	1.846
Confidence Benefits	0.104 (0.039)	1.71
Physical Layout	0.835 (0.034)	1.318
R <sup>2</sup>	0.723	

Adjusted R <sup>2</sup>	0.720	
Beta coefficients with standard errors in parenthesis, ** p ≤ .05		

Model 1 reveals that four independent variables (core service quality, social benefits, confidence benefits and physical environment ) has positive contribution to customer satisfaction of the bank All four corresponding regression coefficients of independent variables are significantly greater than zero (b = .0.296, p ≤ .05; b = .120, p ≤ .05; b = .104, p ≤ .05; b = .0.835, p ≤ .05). And core service quality, social benefits, confidence benefits and physical environment can explain variance of customer satisfaction at 72.0 %. That means H2<sub>a</sub>, H2<sub>b</sub>, H2<sub>c</sub>, and H2<sub>d</sub> rejected Ho. This result is consistent with the conclusion of Ruiz-Molina, Gil-Saura and Berenguer-Contri. (2009) and Al-hawari (2014). Bitner (1990) concluded that tangibles and physical surrounding had significant impact on customer satisfaction and intention. Physical layout or tangible aspects compliments the core service and the relational benefits to enhance the customers experience with the bank. Ambience and physical facilities help to change the perception and mood of the customers regarding to the quality, convenience, comfort , efficiency and brand value. Thus, tangible factors influence customer satisfaction and loyalty. However, Jamal and Naser ( 2003) concluded that physical surrounding and tangible factors were not influencing factors of customer satisfaction. The result is on contrast because the research study by Jamal and Naser (2003) were based on pakistani women whose main concern were core service quality including interest rates than other aspects while the research. Anderson and Sullivan (1993) as well as Cronin and Taylor (1992) concluded that core service quality was a causal antecedent of customer satisfaction. Jamal and Naser ( 2003) also confirmed in their study that core service quality as significant factor affecting customer satisfaction in banking industry. The result depicts that core service quality , tangibles and the relational benefits i.e social benefits and confidence benefits are causal antecedent for customer satisfaction and customer loyalty.

Table 5

*Analysis of relationship between customer satisfaction and customer loyalty, Special Treatment benefits and Customer Satisfaction and Accessibility and Customer Satisfaction using Pearson Correlation Coefficient*

Independent Variable	Dependent Variable	
	Customer Satisfaction	Customer loyalty
Customer Satisfaction	1	0.626**
Special Treatment Benefits	0.497**	-
Accessibility	0.400**	-

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

Table 4 shows the result from the Pearson correlation coefficient about the nature of relationship between customer satisfaction and customer loyalty. The significant level is 0.00 which is less than 0.01 ( $0.00 < 0.01$ ), which means the null hypothesis ( $H_{2o}$ ) is rejected. Thus, there is significant relation between customer satisfaction and customer loyalty to the bank. Besides, the Pearson correlation score is 0.626, which means that there is a medium positive correlation between customer satisfaction and customer loyalty. This result is in the line with the result of Mohsan, Nawaz and Khan (2011) and Koduah and Farley (2016) who all concluded that there is significant positive correlation observed between the customer satisfaction and customer loyalty relationship of retail banking industry.

Table 4 also shows the result from the Pearson correlation coefficient about the nature of relationship between special treatment benefits and customer satisfaction. The significant level is 0.00 which is less than 0.01 ( $0.00 < 0.01$ ), which means the null hypothesis ( $H_{3o}$ ) is rejected. Thus, there is significant relation between special treatment benefits and customer satisfaction. Besides, the Pearson correlation score is 0.497, which means that there is a medium positive correlation between customer satisfaction and

special treatment benefits. This result is consistent with the conclusion of Ruiz-Molina *et al.* (2009) and Al-hawari (2014). In service industry, special treatment to the customer is one of the key strategy for increasing satisfied customer base. In the nature of banking business, usually special treatment is more likely to be served to business clients rather than retail clients. Thus, the result has established a notion that although special treatment compliments the customer satisfaction in the financial sector but compared to the other factors such as service quality and relational benefits i.e. Social benefits and confidence benefits, special treatment benefits seems to be of less definitive importance.

Furthermore, table 4 also shows the result from the Pearson correlation coefficient about the nature of relationship between accessibility and customer satisfaction. The significant level is 0.00 which is less than 0.01 ( $0.00 < 0.01$ ), which means the null hypothesis ( $H_{4_0}$ ) is rejected. Thus, there is significant relation between accessibility and customer satisfaction. Besides, the Pearson correlation score is 0.40, which means that there is a medium positive correlation between accessibility and consumer satisfaction. The result is consistent with the conclusion of Clemes *et al.* (2010) as well as Levesque and McDougall (1996). However, the result of Gupta and Dev (2012) depicted very high correlation between accessibility and customer satisfaction. Due to competition among the different banks, the number of branches, ATMs and CDMs are located in almost every strategic locations around Thailand. Hence, accessibility is seen as a necessity rather than satisfaction factor to the client in Thailand than India.

Table 6

*Result of group statistics*

<b>Customer preferring</b>	<b>Mean</b>	<b>Standard Deviation</b>
Traditional banking	5.3882	1.49419
E-banking	4.0956	1.25621

Table 7

*Analysis of customer satisfaction based on type of customer using Independent Sample T Test.*

<b>F</b>	<b>Sig</b>	<b>t</b>	<b>df</b>	<b>Sig (2Tailed)</b>
7.983	0.005	9.347	398	0.000
		9.379	391.162	0.000

Based on the table 5 and table 6, as indicated in the Levene's test the sig=.0.005 which is less than 0.05. ( $0.005 < 0.05$ ) and the corresponding p value is also less than 0.05 ( $0.00 < 0.05$ ). Thus, it means that null hypothesis ( $H_{5_0}$ ) is rejected. Hence, there is a significant difference between customers with traditional banking preference that exercised ( $M = 5.3882$ ;  $SD = 1.49419$ ) and the customer with e-banking preference ( $M = 4.0956$ ;  $SD = 1.25621$ );  $t(398) = 9.347$ ,  $p = .00$ " regarding customer satisfaction. These factors are critical for satisfaction of traditional and e-banking customers. The result are consistent with the result of Mobarek (2007), John and Rotimi (2014) and Kumbhar (2011) who all concluded that system efficiency, speed, security and convenience are significant factors that satisfy online banking customers while traditional banking customers are satisfied by core banking service and relational benefits.

### **Conclusion and Recommendation**

The primary objective of the research paper was to investigate whether a significant relationship exist between the various factors of e-banking with the customer satisfaction and customer loyalty of the commercial banks in Bangkok, Thailand. The research also tested whether there was significant difference in customer satisfaction between traditional banking preferring clients and e-banking preferring clients. The research revealed important and interesting results regarding the tested relationship which might be useful for developing new strategies in the banking sector.

The study confirms that core service quality, social benefits, confidence benefits and physical environment are determinants of customer satisfaction. Moreover, liner

regression result can explain that these four independent variables impact customer satisfaction by 72%. Furthermore, there is a significant correlation of special treatment benefits and accessibility with customer satisfaction. Due to the regulation from the central banks, the interest rates of all the competitive banks are more or less similar. The product differentiation in the financial sector is difficult so banks need to play in the mentioned factors in order to get better edge than other competitors.

Banks need to focus on their core service, relational service i.e. confidence benefits, special treatment benefits and social benefits and lastly their physical layout and accessibility in order to improve their e-banking service. The core of the bank is a multidimensional aspect which includes the service functionality, service portfolio or service efficiency delivered by the bank whether online or offline. Banking industry being predominantly a service institution, the decision makers of the bank need to focus on creating new strategies for providing better service to their customers.

Similarly, in financial institution where customers perform financial transaction, a basic level of trust is required. Thus, relational benefits such as confidence benefits, special treatment benefits and social benefits improve the relationship between client and the financial institution resulting increase in trust and confidence of client upon bank and in long term loyalty towards the bank. Thus, key managers need to focus on the banks important clients and create a healthy relation with them by providing error free services as much as possible and also acknowledging the service problems of client and trying to solve them as soon as possible. People hesitate to perform online cash transactions so creating the websites or mobile application with a visible cue that the transactions are secured through various mechanisms helps to ease the customer. Different layer of security feature yet convenient and easy transaction has to be the focus of the technical department of the banks.

Physical environment and facilities help to change the perception and mood of the customers regarding to the quality, convenience, comfort, efficiency and brand value. Thus, tangible factors influence customer satisfaction and loyalty. Good ambience of the bank helps to ease the stress of the clients. The layout of the ATMs, CDMs, websites, mobile applications, color choice, lighting and also the ambience can have significant impact on the customers satisfaction. In the regression model, the beta of physical layout was highest which means that proper investment in the tangible designing

of bank actually is a long term investment for customer satisfaction and brand value of the banks.

Service accessibility of the bank is a necessity in today's cut throat competitive environment. Whether strategic locations of ATMs, CDMs in shopping malls, easy access of the websites and mobile applications, fast transactions impacts greatly on the customer satisfaction. Thus, bank needs to cross market with shopping malls and strategic locations, shopping brands, food and beverage brands, utility providers in order to be accessible to the customers for the financial transactions.

Modern clients of banks can't be mutually exclusive in terms of traditional banking or e-banking yet their preference can be one. The research has thus focused on the banking preference of the clients of the commercial banks and interesting result has been concluded that there has been significant difference in traditional and e-banking preferring clients terms of customer satisfaction. The indicators of core service quality, tangibles, confidence benefits and social benefits are completely different in e-banking and traditional banking. The work efficiency and social skills of employees as well as physical surrounding of the bank play integral role for the offline consumers while the proper functioning of the ATMs, CDMs, websites, mobile applications as well as the security features and their integration with social sites, email id and mobile numbers play vital for e-banking clients.

The concept gets more complex as the financial factor i.e interest rates tends to be more or less same among all the banks. In that context, traditional banking preferring customers seem loyal to the bank on basis of efficiency of core service delivered by bank, relationship with the bank staffs, convenience and accessibility of banks and switching barriers for example their salary accounts or previous engagements i.e loans from specific banks. E-banking preferring customers tend to be loyal to bank due to factors such service personalization, convenience and easy access, array of bank services, continuous improvement and bug free applications on various electronic platforms.

### **Limitations and further study**

The research has been conducted only within certain business areas of Bangkok and not all over Thailand. Although the findings of the research can be generalized but it has to be kept in mind that the banking behavior might be different in other region of Thailand as

well as other countries due to different economic development of country, income level of people, education status, their social cultural values and technological development. Moreover, only six factors has been kept in account as determinants of the customer satisfaction and the customer loyalty. Marketing aspect of the e-banking is focused more but as e-banking is a technological discipline many factors has been not included in the framework. As the technology and the context changes, the framework needs to be updated with new factors in the future. The framework has a generalized overview of factors regarding core service quality, relational benefits and tangibles so further study might be required to find the significant factors inside each generalized factors in context to the traditional and e-banking. Moreover, the attitude towards the customer satisfaction and customer loyalty might be different in depositors and lenders of the banks. Thus, further research is recommended regarding the for mentioned differences.

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