THE FACTORS THAT INFLUENCE CONSUMER USE THE MOBILE BANKING IN BANGKOK



A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2017

COPYRIGHT OF MAHIDOL UNIVERSITY

Thematic paper entitled THE FACTORS THAT INFLUENCE CONSUMER USE THE MOBILE BANKING IN BANGKOK

was submitted to the College of Management, Mahidol University for the degree of Master of Management

on December 23, 2017



Mr. Supachai Ratanachinakorn Candidate

Assoc. Prof. Peter De Maeyer, Ph.D. Advisor

Duangporn Arbhasil, Ph.D. Dean College of Management Mahidol University Assoc. Prof. Roy Kouwenberg, Ph.D., CFA. Chairperson

Ronald Surachai Thesenvitz, Ph.D. Committee member

ACKNOWLEDGEMENTS

I would like to acknowledge the professor, the curriculum and assistant of College of Management, Mahidol University for their support and sacrifice to advise my learning both in academic and non-academic texts during the school hours. Especially, I would like to give my truthful gratitude and thanks to my advisor, Asst. Prof. Peter De Maeyer. He dedicated his abilities, knowledge, and new aspect suggestion to guide every single process of this research.



THE FACTORS THAT INFLUENCE CONSUMER USE THE MOBILE BANKING IN BANGKOK

SUPACHAI RATANACHINAKORN 5949035

M.M. (MARKETING AND MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASST. PROF. PETER DE MAEYER, Ph.D., ASSOC. PROF. ROY KOUWENBERG, Ph.D., RONALD SURACHAI THESENVITZ, Ph.D.

ABSTRACT

This thematic paper is created to explore what variable influence consumer to use internet banking on smart phone. The conceptual framework in the research involve to the number of experience and inexperience users which analysed to indicate the important factors, which influent mobile banking industry among Thai consumer. To have better understanding of mobile banking framework, the research using a quantitative questionnaires survey 104 samples. The questionnaires survey is arranged through online.

This research present how product involve factors and online channel variables impact to mobile banking through variables analysis to specific important factors and test the hypothesis and relationship between factors by variable analysis. The result of this study represented that the significant variable encourage consumer to use the mobile banking. However, the security system and special addition service are the main concerned for every bank company.

KEY WORDS: Mobile Banking/ Internet Banking/ Financial Technology

37 pages

CONTENTS

		Page
ACKNOWLE	DGEMENTS	ii
ABSTRACT		iii
LIST OF TAB	BLES	vii
LIST OF FIG	URES	viii
CHAPTER I	INTRODUCTION	1
1.1	Background	1
1.2	Objective of Thematic Paper	2
CHAPTER II	LITERATURE REVIEW	3
2.1	History of Mobile Banking	3
2.2	Adopter Category	4
	2.2.1 Innovators (2.5%)	4
	2.2.2 Early Adopters (13.5%)	4
	2.2.3 Early Majority (34%)	5
	2.2.4 Late Majority (34%)	5
	2.2.5 Laggards (16%)	5
2.3	Communication and Electronic Industry	5
	2.3.1 Smartphone industry	5
	2.3.2 Network industry	7
	2.3.3 E-Commerce	8
2.4	Demographic Related and Factors	9
	2.4.1 Age	9
	2.4.2 Education	10
2.5	Marketing Mix Related Factors	10
	2.5.1 Product Reliability (Security)	10
	2.5.2 Product variety	10

CONTENTS (cont.)

		Page
2.6 B	enefit Related Factor	11
	2.6.1 Convenience	11
	2.6.2 Low cost and special-offers	11
	2.6.3 Ease to use	12
CHAPTER II RI	ESEARCH METHODOLOGY	13
3.1 R	esearch Design	13
	3.1.1 Population	14
	3.1.2 Sampling Size	14
	3.1.3 Data Collection	14
	3.1.4 Data Analysis	14
CHAPTER IV DA	ATA ANALYSIS	16
4.1 G	ender	16
4.2 A	ge	17
4.3 R	evenue Range	17
4.4 E	ducation Range	18
4.5 R	eason to Use Mobile Internet	18
4.6 M	lobile Banking Experienced User	19
4.7 B	asic Function Requirement	19
4.8 Fa	actor Requirement	20
4.9 N	eeded Factors	21
4.10 A	ttractiveness Media and Tools	21
4.11 A	ttractiveness Additional Service	22
4.12 H	ow Did You Know Mobile Banking?	23
4.13 R	elated Components on Mobile Banking Consumer Want	23
4.14 D	iscussion	24
CHAPTER V CO	ONCLUSION AND RECOMMENDATION	25
5.1 C	onclusion	25
5.2 R	ecommendation	26

CONTENTS (cont.)

vi

5.2.1 Security and simplified product with additional	
service	26
5.2.2 Communication and activity in an effective way	27
5.3 Research Limitation and Future Research	27
REFERENCES	28
APPENDICES	29
Appendix A: Questionnaire	30
BIOGRAPHY	37

LIST OF TABLES

Г	able		Page
	4.1	General Information on 104 respondents: Gender	16
	4.2	General Information of 104 respondents: Age	17
	4.3	General information of respondents: Revenue range (Baht per Month)	17
	4.4	General information of respondents: Education range	18
	4.5	General information of respondents: Reason to use mobile internet	18
	4.6	General information of respondents: Mobile banking experienced user	19
	4.7	General information of respondents: Basic function requirement	19
	4.8	General information of respondents: Factor requirement	20
	4.9	General information of respondents: Needed factors	21
	4.10	General information of respondents: Attractiveness media and tools	21
	4.11	General information of respondents: Attractiveness Additional Service	22
	4.12	General information of respondents: How did you know Mobile banking?	23
	4.13	Related components on mobile banking consumer want	23

LIST OF FIGURES

Figur	e	Page
1.1	Percentage of Internet banking in Asia	2
2.1	Category adoptor	4
2.2	Percentage of Mobile banking in developed country	6
2.3	The number of smartphone user in Thailand from 2013 until FC2022	6
2.4	Share of smartphone user in Thailand by region 2016	7
2.5	Percentage of channel branch banking vs mobile banking	8
2.6	Value of E-commerce 2017	8
2.7	Share of individual who used mobile banking	9
3.1	Research Methodology step	13
3.2	Research Design	15
4.1	Related components on mobile banking consumer want	24

CHAPTER I INTRODUCTION

1.1 Background

In globalization generation, innovation changes every day. The technologies and communications come to impact a lot in the daily life in many aspects such as business, educations, and social. Moreover, the innovations are the type of tool that supports us to improve convenient environment especially, in term of the financial industry that creates the variety of service types to response the consumer behavior changed.

Making the financial activities on the electronic platform that are the new choices for communicating and running the operation in the world by relying on the efficient and effective innovations but the new platforms and procedures that are different from the old versions a lot that will impact to the most bank directly.

The international banks draw the customer to come to their service via new electronic, especially the mobile banking. From the research, the company will apply the technologies in the firm that could decrease the cost of operation by decreasing the number of employees and decrease time used. Moreover, the researcher studies the trend to use internet banking.

However, nowadays, the number of users who make the transaction via mobile banking in Thailand just only 19% that too low compared to Asia regional because customer thinks the activities like transfer, deposit and bill payment fee via mobile banking aren't safe as same as counter service in physical store. In addition, the users don't have the knowledge of mobile banking enough to get the confidence to make the transaction via online. Moreover, there has a research that analyzes the factor of these such as gender, revenue, level of education and level of internet access. In addition, some research says that there has other factor blocked the customer to response lowly such as haven't the knowledge from bank enough, not convenience to use.



Figure 1.1 Percentage of Internet banking in Asia Source: Thailand communication 2016

Next, the mobile banking almost on the mobile application that is a factor that supports to increase the number of the smartphone. Mobile-applications are the tool to divide customer to switch from feature phone to smartphones. The applications are developed following to the innovation, all the time that the developed mobile application is part of daily life such as entertainment, music etc. For example, in case Youtube can gain the customer to download and use it a lot and people switch to watch Youtube on TVs. However, this paper assumes that mobile-application be the great tool for increasing the user.

So, the matic paper that is made to study the factors that impact to rate of used mobile banking and find the tools to increase the number of users rapidly. For the papers is made in order to support financial organization to make the benefit and be the ways to develop financial industries in Thailand.

1.2 Objective of Thematic Paper

1. To study the decision process about innovation and agreeing of technology

2. To study the opportunity and obstruction to increase the rate of mobile banking users in Bangkok.

3. To study the tools that can support the function of the mobile banking application.

CHAPTER II LITERATURE REVIEW

Presently, technology advancement doesn't change only the shopping behavior and lifestyle of the consumer but also impacted to the method of payment especially, in the globalization mobile phone industry grown rapidly. Increasing of the mobile phone product made through the related products and services lead to high impression especially, service products via application in the smart phone that made the new businesses likes application writer and application designer. The new coming trend is mobile baking that most financial companies focus and try to develop their product to fight with competitors. This chapter presents a summary of literature review from other researchers or articles. Moreover, the meaning of variable that improves the number of user mobile banking and discusses the future concept of the framework.

2.1 History of mobile banking

Mobile banking was established in 1999 by Deutsche Bank and PayBox company (Wikipedia). The first version of mobile banking launched before the financial company offered and mobile phone had the low technology with function and accessibility. Mobile phone, Computer, Notebook hadn't the good support for the software and hardware that the low support such as slow network, low-security system, and the size of mobile phone had blocked the growth of mobile banking tools. But nowadays, the technologies have been developed that the platform of mobile changed to support the convenience, the facility likes network that is improved by each provider and the cost of the internet also be reduced very much. All reason that changes the trend and behavior of present consumer that spend a lot of time with their mobile phone. This effect impacts to consumer switching, people who use a computer for online banking move forward to mobile banking. However, the key obstacle is consumer reliability with a security issue (ING international survey 2016, 2016) because the consumer trends to use the mobile

banking increasingly that attract to the hacker to expect to penetrate the account for gaining the cash or the right of the owner. So, if the financial provider can get rid of obstacles that are the opportunity to improve the number of mobile banking user.

2.2 Adopter Category



Figure 2.1 Category adoptor

Source: https://ondigitalmarketing.com/learn/odm/foundations/5-customer-segments-technology-adoption/

The mobile banking is the new thing for Thai people that this article would like to apply the adopter categories to analyze and indicate the step of mobile banking and need to know "what will the financial company have to do for driving the number of users?"

2.2.1 Innovators (2.5%)

Innovators are the first group of people to adopt an innovation. Innovators willing to take the risk, youngest in age, have the high social class, have a good financial lucidity and very social. They have a high-risk tolerance to use the technologies.

2.2.2 Early Adopters (13.5%)

This is the second group of people who adopt an innovation as at 13.5% of all. Their background graduated the highest degree, younger in age, high-class social

status and advance education. More discrete in adoption choice more innovators and they don't take the high risk like innovators.

2.2.3 Early Majority (34%)

This the third group of people as at around 34% of all that they don't like to apply innovation immediately that tend to be slower in the adoption process. Their characters have above average social status, contact early adopter.

2.2.4 Late Majority (34%)

This group will adopt an innovation late that after the average of all population. These groups are so high degree of skepticism. They will apply the innovation after they get the confident enough. Their characters have below average status, low financial lucidity and low opinion leadership.

2.2.5 Laggards (16%)

The last group to adopt an innovation. Their characters have lowest average social status and financial fluidity, be oldest of all other adopters, in contact with only family and close friend.

2.3 Communication and Electronic Industry

2.3.1 Smartphone industry

Around 40 years after launching the introduction of the first mobile phone, almost the developed country. The surveyed has more than 60% mobile phone penetration. Thailand, the Thai consumers have the increasing rate of the number of smartphone from Y'2014 and forecast to increase as at 30.05 million the smartphones in 2022. Over 50% of the population in Thailand use the smart phone especially, Bangkok more than 70.3% of all. The factor to increase the number of the smart phone that has 4 main reasons. Firstly, 4G fueling smartphones that network like 4G/Wifi can catch up the consumer that provide the variety of service and product. This factor relates to the number of

mobile banking user extremely because most mobile banking provider whom services via application in the smartphones that so easy to use and reachable.



Figure 2.2 Percentage of Mobile banking in developed country Source: ING international survey 2016



Figure 2.3 The number of smartphone user in Thailand from 2013 until FC2022 Source: www.statista.com



Figure 2.4 Share of smartphone user in Thailand by region 2016 Source: www.statista.com

2.3.2 Network industry

The word of the Internet can split into 2 words are inter and net inter means among and net means to network. Internet was established in 1960 and has been developed. For the first time, the internet was used only by the researcher that internet was difficult to use its function support just e-mail and telnet. In Thailand, the internet started to be popular more than 15 years after the trend of desktop computer increasing but in the primary period around 10 years ago less user than now because the facility and service didn't support people to use a lot. (Chaoz, 2013) However, after Thai government focus to develop this point and the internet market has a high competitive that consumers get the benefit of the good system with lower cost. So, the present consumers start to change behavior and lifestyle a lot something they apply the internet on the smartphone to find or buy instead of going to the physical store like the banking that the trend of user changed what the rate of user use the mobile banking growth reverse the user go to the physical store. So, Network industry is a key factor to switch the consumer from store to mobile.



Mobile Banking Exceeds Branch Banking



2.3.3 E-Commerce

According to ETDA'16, e-commerce market value in Thailand was 2,560 billion baht in 2016 and estimate to growth 9.86% in 2017 that get the impact from smartphone user increasing, internet's infrastructure was developed and the innovation of payment process changing. So, this can indicate that the growth of e-commerce market related to the financial platform directly because consumers find and buy any product on their mobile phone and pay to spend money via smartphone too that help them to end the path to purchase conveniently so, e-commerce is the main factor to lead the number of mobile banking user more.



Figure 2.6 Value of E-commerce 2017

Source: https://www.etda.or.th/content/value-of-e-commerce-survey-2016.html

2.4 Demographic Related and Factors

2.4.1 Age

The generation of consumer impact to the attitude on accept the technologies in their life, in term of mobile banking is a tool of the technologies. From Keith Reeves'14 who described the Baby Boomers who was born after world-war2 that the technology didn't relate their life more which different to the generation X who live with developed technology period that they need to adapt themselves to apply the job and environment with the technology all the time such as evolution of computer, mobile phone etc. In term of generation Y and Z tend to adapt to the technology easily and comfortably because these groups are born with developed technology existing. So, the young generations have the opportunity to adopt mobile banking if they get the knowledge and test the innovation. However, the elder generation like Baby Boomers and generation X open to getting the technology from the percentage of share in European user that increase from 39% shares to 52 % shared although, some elder person who got the negative view with the technology change.

	Maturists (pre-1945)	Baby Boomers (1945-1960)	Generation X (1961-1980)	Generation Y (1981-1995)	Generation Z (Born after 1995)
Formative experiences	Second World War Rationing Flaed gender notes Rock V/ Rat Nuclear families Defined gender notes— perfocularly for women	Cold Wor Post-Wat boom "Swinger Suber" Apolio Moon Bandings Nouth culture Woodstock Pamily-orientation Rule of the terminger	End of Cost Way Fail of Berin Walt Regar / Costocher Thatberson Los Aid Introduction of Fat RC Early mobile technology Latch-key kids, rangi jevits of divoror	W11 tensed attacks Providence Social media Insecon ef trab Resity TV Coge Earth Carchindury	Economic downhum Citotei warming Citotei thous Mobile devices Energy Olisis Anto Spring Produce own imedia Cloud computing Will-Heaks
Percentage in U.K. workforce*	3%	33%	35%	29%	Currently employed in either part-time jobs or new apprenticeships
Aspiration	Home ownership	Job security	Work-life balance	Freedom and flexibility	Security and stability
Attitude toward technology	Largely disengaged	Early information technology (IT) adaptors	Digital Immigrants	Digital Natives	"Technolics" - entirely dependent on IT, limited grasp of alternatives
Attitude toward career	jobs are for life	Organisational — careers are defined by employers	Early "portfolio" careers — loyal to profession, not necessarily to employer	Digital entrepreneurs — work "with" organisations set "for"	Career multitarities
Signature product	Automobile	Television	Personal Computer	Tablet/Smart Phone	Coogle glass, graphene, nano-computing, 3-D printing, driverless cars
Communication media	Formal letter	Telephone	E-mail and text message	Text or social media	Hand-held (or integrated into clothing) communication devices
Communication preference	Face-to-face	Face-to-face ideally, but telephone or e-mail if required	Text messaging or e-mail	Croine and mobile (text messaging)	Facetime
Preference when making financial decisions	Face-to-face meetings	Face-to-face ideally, but increasingly will go online	Chine — would prefer face-to-face if time permitting	Face-to-face	Solutions will be digitally

Figure 2.7 Share of individual who used mobile banking

Source: http://www.business2community.com

2.4.2 Education

According to technology adoption from Mr. Nuttaputch (http://www.nuttaputch. com), told that the most of the people who apply the innovation early or we call "innovator", this group has the same character that has high education and knowledge from many sources that they have some information support to make the decision and take the risk. So, this factor is the concerned point to prove for finding the opportunity to increase the number of mobile banking user.

2.5 Marketing Mix Related Factors

2.5.1 Product Reliability (Security)

Money or cash are the one of four factors that important to everyone. Bank is the service provider that has a high reliability to take care the asset of each people. Before, when the consumers want to deposit or withdraw their cash, they will go to the physical bank and make the transaction by themselves that they feel safe for making it because they take it by themselves and get the physical evidence from the bank but in the mobile banking, transactions are created by system and generate e-slip. So, the E-slip from mobile banking is new thing for Thai consumers that not familiar with. Moreover, there have the news about hacker on the website thoroughly that impact to Thai consumer still concern about the transaction in mobile banking that can hacked. However, if the financial companies can develop and communicate the solution from hacker widely, it is the high opportunity to gain new mobile banking user

2.5.2 Product variety

Product variety determine the number of service that mobile banking provide to user within specific product category what offered at the same time. Also, reply to the availability of a range of services and products. In financial sector, the financial product has any type such as the basic services like deposit, withdraw, transfer or special services; fund, insurance, bill payment. In the past, financial company try to develop the product to attract the customer thoroughly but every company developed the product that aren't different more other company. Moreover, they expanded a lot branch thoroughly Thailand. So, the main financial products aren't the point to switch from the consumer who go to the bank directly to apply the mobile banking. So, exception of the main financial product that the financial company should deep down to analyze the type of service what is the special service with suitable for the easy accessibility tools like smart phone that can draw the consumer to use mobile banking. This action can lead the smart phone user to register the bank account to mobile baking application.

2.6 Benefit Related Factor

2.6.1 Convenience

Today, the consumer behavior considers the convenience life. For example, the retail market industry that consumer go to big physical stores have a frequency visit per month declining what consumer focus convenience, they go convenience store or e-commerce platform instead to decrease the time-consuming because consumer want to spend time effectively among a lot of thing to and infrastructures are developed extremely. Consumer has a choice to select and plan so, some country such as Chinese the e-commerce has a size of business bigger than physical store. In term of mobile banking as same platform as mobile banking that was built for convenience to create mobile transaction such as transfer, bill payment, cardless ATM, etc. So, if it concerns only convenient aspect, the number of mobile banking will increase surely.

2.6.2 Low cost and special-offers

In term of cost that benefit for 2 participants, mobile banking user and mobile banking provider. Mobile banking user get the benefit of the service fee and time saving. Today, mobile banking provides the service and product quite like the physical bank but they waive some service fee to draw the consumer to switching the behavior and channel such as free transfer service, bill utilities and mobile internet without additional charging that are beneficial for consumer. Secondary participant, the mobile banking provider can save the money and investment about their branch such as salary of employees, utilities fee, decoration, explees fee etc. So, low cost is beneficial for consumer and this is the one variable for consumer to come mobile banking service.

2.6.3 Ease to use

According to interaction design foundation that give the meaning about ease of use that is a straightforward concept "it's a measurement of how easy the finished product is to use by its intended users". The design usually try to merge the functionality and delivering ease of use. It necessary to consider ease of use before start to design the product. Mobile banking also has to be designed for easy and accessibility.



CHAPTER III RESEARCH METHODOLOGY

The objectives of a thematic need to identify the variable that influences customer or people to use the financial application on a mobile telephone in order to deliver the information to financial industry in Thailand. Moreover, thematic can indicate how to increase the number of the users of the financial application. From the literature described the behavior and psychological framework, so thematic will be developed following the framework. This unit concludes thematic design and questionnaire, collecting data and data analysis.



Figure 3.1 Research Methodology step

Source:https://sanjayachauwal.wordpress.com/2017/09/17/research-methodology-unitwise-note-with-board-exam-solutions-103-pages/

3.1 Research Design

The research methodology that applies to survey the main factor which influences the behavior of financial application user by quantitative research. This thematic applies to quantitative research because the method is less costly and proper to summary and show the result by numerical data that benefit to be the information to test the hypothesis and assumption. Moreover, to indicate the variable for the behavior of customer to use mobile banking that this thematic will be applied to mobile consumer.

3.1.1 Population

Selected mobile consumer in Bangkok who have smart phone and bank account.

3.1.2 Sampling Size

Thematic surveys the factors that impact to mobile banking for people who have mobile phone and bank account. So, the target population is Thai people who live in Bangkok. The sample size of 100 is determined as suitable sample size and appropriate.

3.1.3 Data Collection

The survey was approached by online. The target population of survey is Thai people who have mobile phone and bank account. The online questionnaires are a convenience for the targeted population. The survey form sent and distributed by online via Line, Facebook and Gmail application.

From the survey, there were 150 questionnaires and returned by 104 respondents. About the data stage to indicate the scale of criteria that apply 4 scales from 1-4 points; 1 described strongly disagree and 4 described strongly agree. The survey has 2 chapter; the first chapter asks about demographic and basic information and the second chapter explores the behavior that provides.

3.1.4 Data Analysis

After gathering the survey, this thematic is applied the statistic package for social science (SPSS) to analyze the data in 3 tools. Firstly, the Descriptive statistic is applied to determine the respondents' background, for example, gender, age, monthly income, career and any suggestions. The result will be showing frequencies, factor analysis, and screen plot are applied to define the attitude of respondents about mobile banking such as internet experience, banking experience that results will show the rating of each point. Finally, Crosstabulation method that finds the relationship between two variables or multi-variables such as internet experience and internet access.



Figure 3.2 Research Design

CHAPTER IV DATA ANALYSIS

After sending the questionnaire via online survey website, the number of respondents is 104 persons who live in Bangkok and o. The SPSS method was used to analyze the data received from the online survey. The result show as follows.

From the 104 respondents that answered the online survey via the internet. This thematic applies Microsoft Excel and SPSS to analyze the data. The result is shown below.

4.1 Gender

Gender	Amount	Percent
	of People	age
Female	46	44%
Male	58	56%
Grand Total	104	100%

 Table 4.1 General Information on 104 respondents: Gender

From table 4.1 show the number of respondents 104 persons that Male is 58 persons (56%) and Female is 46 persons (44%).

4.2 Age

Age	Amount of people	Percentage
Under 22 years old (Gen-Z)	12	12%
22-30 years old (Gen-Y)	64	62%
31-40 years old (Gen-Y)	26	25%
41-50 years old (Gen X)	1	1%
51-60 years old (Baby boomer)	1	1%
Total	104	100%

 Table 4.2 General Information of 104 respondents: Age

Table 4.2 shows the age of 104 respondents. The aging rate 22-30 years old contribution 62% of all respondent, 26 persons in 31-40 years old (25%) that both are represented Gen-Y. 12 persons under 22 years old (12%), 1 person in 41-50 years old(1%) and 1 person in 51-60 years old (1%)

4.3 Revenue Range

Revenue Per month (Baht)	Amount of people	Percentage
Lower 15,000 baht	13	13%
15,001 - 30,000 baht	22	21%
30,001 - 45,000 baht	34	33%
45,001 - 60,000 baht	14	13%
More than 60,000 baht	21	20%
Total	104	100%

 Table 4.3 General information of respondents: Revenue range (Baht per Month)

Table 4.3 shows the range of salary or revenue per month from 104 respondents. The highest range is 30,001 - 45,000 baht (33%), secondary group is 15,001 - 30,000 baht (21%), 205 of all respondents have salary more than 60,000 baht per month, lower 15,000 baht and 45,001 - 60,000 baht each contributed 13% of all.

4.4 Education Range

Education	Amount of People	Percentage
High school or lower	4	4%
Bachelor degree	62	60%
Master degree	38	37%
Total	104	100%

Table 4.4 General information of respondents: Education range

Table 4.4 shows the range of education level from 104 respondents. Main group graduate bachelor degree around 60% of all, 37% of all respondents achieve the master degree and the last group is high school or lower just 4% of all.

4.5 Reason to Use Mobile Internet

Table 4.5 General information of respondents: Reason to use mobile internet

Reason to use mobile internet	Frequency	Percentage
Search Engine	77	19%
Chat or Communication (Gmail, Line, FB)	90	22%
Entertainment (Youtube, Netflix, Game)	90	22%
Purchase goods and service	55	14%
Job search	26	6%
Banking transaction	65	16%
Total	403	100%

Table 4.5 show the reason to use mobile banking that represent most of mobile internet user usually use mobile internet for communication and entertainment (44%) that are the core activity in every day, search engine around 19% of all respondents, banking transaction 16%, purchase goods and service 14% and job search just 6% of all. From the survey, if any organization wants to promote or increase the number of any activity, they can make the activity relate to 3 main reasons that can generate high effectiveness result.

4.6 Mobile Banking Experienced User

Table 4.6	General information	1 of respondents:	Mobile banking	ng experienced	user
				0 · · · · · · · ·	

Mobile banking experience	Amount of people	Percentage
No (jump to question no.8)	11	11%
Yes	93	89%
Total	104	100%

Table 4.6 shows the number of mobile banking experienced user and inexperienced user. 89% of all respondents have experience in mobile banking and 11% of all don't have any experience in mobile banking.

4.7 Basic Function Requirement

Basic Function	High important Important		Somewhat Influence	Not important	Point
Balance Checking	69	26	8	1	371
Transfer	83	19	1	1	392
Bill payment	42	45	15	2	335
Loan request	11	19	45	29	220
Emergency button	38	34	29	3	315

 Table 4.7 General information of respondents: Basic function requirement

Basic Function	High important		Somewhat Influence	Not important	Point
Funding (LTF,RMF)	20	35	39	10	273
News	15	23	45	21	240
Cardless (ATM)	32	37	26	9	300
Foreign exchange service	18	36	32	18	262
Total	328	274	240	94	2,708

 Table 4.7 General information of respondents: Basic function requirement (cont.)

Table 4.7 represents the top of basic function needed that apply weighted the frequency to the points (Hight important:4, Important: 3, Somewhat important:2, Not important:1). From the result, respondent needed the transfer, balance checking and bill payment to the top3 of consumer's mind respectively.

4.8 Factor Requirement

Factor Requirement	High important	Important	Somewhat Influence	Not important	Point
Fast speed and easy to access	73	28	3	0	382
Personal Information	96	8	0	0	408
Security from hacker	95	8	1	0	406
Free or cheap transaction fee	58	35	10	1	358
User-friendly	70	29	3	2	375
Variety of service	46	42	15	1	341
Service center (Emergency Support)	64	30	8	2	364

 Table 4.8 General information of respondents: Factor requirement

Table 4.8 represents the level of factors that attract the consumer to use mobile banking, we apply weighted the frequency to the points (Hight important: 4, Important: 3, Somewhat important: 2, Not important: 1). Consumer need and concern in personal information secret and security from hacker or internet robbery highly. So, if banking company can solve or develop the system, they will gain a lot of new consumers or switch the consumer from the competitor company. About ranking no.3 and 4 (fast speed and user-friendly) are so important to the consumer in term of competitive advantage.

4.9 Needed Factors

Factor to Reject	High important	Important	Somewhat Influence	Not important	Point
Lack of confidence in system	87	13	4	0	395
Concern the service fee	66	29	9	0	369
Personal information	89	11	4	2	397
Lack of physical evidence	55	33	0	0	321

 Table 4.9 General information of respondents: Needed factors

Table 4.9 represents the level of factors that consumer need to have in the application or system in mobile banking, we apply weighted the frequency to the points (Hight important: 4, Important: 3, Somewhat important: 2, Not important: 1). The consumer needs the system or solution that can support the security and personal information secret issue. In term of the service fee is priority no.3. So, we summarize that consumer needs the system to support secret information, security system, and service fee.

4.10 Attractiveness Media and Tools

Attractiveness tools	High important	Important	Somewhat Influence	Not important	Point
Banner on website	21	35	31	17	268
Booth activity give knowledge	18	37	34	15	266
Advertisement on TV	22	35	31	16	271
Free Training on Youtube	20	41	28	15	274
Free internet access	48	32	15	9	327
Invite from QR in restaurant	54	34	14	2	348
Total	183	214	153	74	1,754

 Table 4.10 General information of respondents: Attractiveness media and tools

Table 4.10 represents the level of impacted media that consumer interest and can attract them to apply mobile banking. We apply weighted the frequency to the points (Hight important: 4, Important: 3, Somewhat important: 2, Not important: 1). Consumer focus to use the mobile banking in the real life that so attractive them to use. The restaurant is the great choice to apply it. Moreover, Free internet access is second choice for them that support consumer to use it everywhere then they want.

4.11 Attractiveness Additional Service

Attractiveness Additional Service	Frequency	Percentage	
Restaurant recommendation	35	14%	
Shopping online	51	21%	
Game	14	6%	
Tax calculation	62	25%	
Variety (Healthy tips, Sport)	14	6%	
Revenue expense Note	70	28%	
Total	246	100%	

 Table 4.11 General information of respondents: Attractiveness Additional Service

Table 4.11 represents the popularity of additional service that consumer interest and can attract them to apply mobile banking. We apply weighted the frequency to the points (Hight important: 4, Important: 3, Somewhat important: 2, Not important: 1). Consumer focus to use the mobile banking in the real life that so attractive them to use. The restaurant is the great choice to apply it. Moreover, Free internet access is the secondary choice for them that support consumer to use it everywhere then they want.

4.12 How Did You Know Mobile Banking?

How did you know Mobile banking	Frequency	Percentage	
Advertisement on internet	41	24%	
Radio/TV broadcasting	14	8%	
Search engine	17	10%	
Bank Booth activity	44	25%	
Newspapers/Magazine	4	2%	
Billboard/Poster	9	5%	
Friend/Family	45	26%	
Total	174	100%	

 Table 4.12 General information of respondents: How did you know Mobile banking?

Table 4.12 represents how did consumer know mobile banking that consumer knows the mobile banking, the question was made to answer more than 1 choice. The top 3 of all that have the frequency to select so nearly Friend/family 26%, Bank booth activity 25% and advertisement on internet 24%. So, if the banking industry wants to draw consumer to use mobile banking which they apply top3 rank of the way to know mobile banking, they will succeed to get a lot of new consumers.

4.13 Related Components on Mobile Banking Consumer Want

Table 4.13 Related components on mobile banking consumer want	Table 4.13	Related com	ponents on	mobile bai	nking consi	umer want
---------------------------------------------------------------	-------------------	-------------	------------	------------	-------------	-----------

	Total Variance Explained									
Component	Initial Eigenvalues			Extractio	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	2.881	36.008	36.008	2.881	36.008	36.008	2.347	29.336	29.336	
2	1.187	14.840	50.848	1.187	14.840	50.848	1.704	21.302	50.638	
3	1.086	13.578	64.426	1.086	13.578	64.426	1.103	13.788	64.426	
4	.865	10.806	75.232							
5	.656	8.202	83.434							
6	.559	6.982	90.417							
7	.444	5.552	95.969							
8	.323	4.031	100.000							

Extraction Method: Principal Component Analysis.



Figure 4.1 Related components on mobile banking consumer want

Table 4.13 represents the result from SPSS method. There are 3 related variables that impact the mobile baking behavior to make a decision to use mobile banking for people in Bangkok. The first factor is fast speed to access which consist of access to the system and speed while users are using untie finish the transaction. The second factor is security personal information that consists of name, ID card no, birthday, etc., The three-factor is security from the hacker that consists of stealing the password, withdraw the money from ATM or transfer money by hack system.

4.14 Discussion

Considering the result of this paper, this shows that the most Bangkok consumer (urbanize) applied the mobile banking via smartphone which 89% of a total number of respondents. It represents that banking company should concern the variables to draw mobile banking user come to their service. Moreover, the searching of research based on the framework agreed that the important factors on using mobile banking were the security of hacker and personal information protection. According to the literature review, there are specified that the consumer uses the mobile banking that is demographic, product mix and benefit. Then transfer and balance checking are the key basic function needed about the concern that security and personal information confidential is the top2 concern that leads the reason to use mobile banking and not use in the same time. Moreover, the additional service like tax calculation and revenue & expense note that is so interesting in the consumer view. In addition, the research tells that the consumer knows the mobile banking from people around them, booth activity and advertisement on the internet. So, we get all the variable to develop the system for gaining consumer to the service as well.

CHAPTER V CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The research found that the consumer trend is changing a lot into mobile banking that is a big opportunity for every banking company to attract the consumer for making the benefit not the only the big company but also small company or startup. Nowadays, every banking is trying to attract their consumer or competitor consumer all the time by making the promotion, activities, easy to use application, etc., that some tactics were good but other was bad. The method will attract the consumer to come to the system and have experience with the mobile banking. Confidence and convenience application that making the consumer want to use it more than last day.

The mobile banking developer has to concern the basic function first that consist of transfer, balance checking and bill payment. About the main factors that draw the consumer to use the service. There are 3 main factors that include Fast and speed access, security of personal information and security from the hacker. The first factor is fast speed and easy to access which is the factor is fulfilled the new lifestyle of present people that need convenience. This factor focus to provide the convenience and safe time to consumers when user wants to pay anything, they can pay it within 1 minute and not take the bag with coin and banknote. The second factor is the security of personal information which about the secret date from the user that they don't want open in case this data is escaped, they will lose privacy life and may be falsified. The last factor is security from the hacker in term of steal the money in the system.

In order to survive in the market, the bank has to attract customer to register the application and spread it by the key communication.

5.2 Recommendation

As the purpose of this thematic wants to specify the key variables and key activities that influence mobile banking user and non-mobile banking user in order to provide the product and service to the financial company in Thailand to get the mobile banking response to consumer's wanted via their application or website. So, the recommendation which mentioned the below paragraph.

5.2.1 Security and simplified product with additional service

Currently, in the mobile banking in Thailand continues heating up every day from the consumer trend to apply mobile banking increasing highly. Many companies try to compete other company with the convenience and fast factors. But there aren't the best real answered for the consumer. Moreover, many banks can't change the perception of making the important transaction in the physical bank. From the research said that consumer needs 3 basic functions in mobile banking with concerned security and personal information especially, experienced user. Moreover, in the daily life that change a lot from the past consumer adjust behavior fellow to the technology such as most people read the news via smartphone, watch the TV program on the application that the consumer need convenience and easy to access. From the research that said consumer want revenue and expense note, tax calculation and recommended the restaurant in the mobile banking system. Therefore, we recommend the financial company to make the short-term and long-term strategy.

5.2.1.1 Short term strategy

• Develop security system in 3 main basic functions: Transfer, Balance checking and, Bill payment

- Create the system to be easy to use and fast process
- Apply the system in high accessibility
- 5.2.1.2 Long-term strategy (Not only financial basis but also be

in the daily life basis)

• Create the loyalty customer with additional service: revenue and expense note, tax calculation and shopping online (for buyer and sale)

5.2.2 Communication and activity in an effective way

In addition, mobile internet user said that they usually take the smartphone for making communication and entertainment and most mobile banking users know the product from 3 main ways: intimate, friend, advertisement on internet and booth activity. Moreover, they interest special activity that attracts the new user to come and trial the mobile banking system, they interest in free wifi when they are using and free transaction cost. So, we recommend the banking company to make the campaign to promote the new mobile banking that apply high-security system by

5.2.2.1 Communication

- Online: Advertisement on Facebook and Youtube
- Offline: Booth activity
- 5.2.2.2 Concept: like and share
- 5.2.2.3 Key focus: Special for new customer Free wifi and free

service charge

5.3 Research Limitation and Future Research

For the research, the high limit is the time. This paper combined the respondents only 104 people due to short-period to conduct the research. The small sampling in term of quantitative research may not represent the correct result of research. The next limitation is the size of the population. The respondents aren't varieties that should be considered in order to make the data wide enough to fulfill every scenario that this research almost surveys the people who be in generation Y so, there isn't represent other generation (X, Z and baby boomer).

For the future research, the scope of question should deep down the positive side and negative side from experience uses. Moreover, the research should test the level of knowledge about mobile banking from respondents. The last, the mobile banking just start in Thailand less than 10 years that 60% Thai people don't any experienced about mobile banking. So, ban company has to up-to-date the tend of consumers to be still on trend as long a

REFERENCES

- Behrooz Noori. (2015). An Analysis of Mobile Banking User Behavior Using Customer. International Journal of Global Business, 8 (2), 55-64.
- Kreyer, N., Pousttchi, K., and Turowski, K. (2002). Standardised Payment Procedures as Key Enabling Factor for Mobile Commerce. In: Quirchmayr, G.; Tjoa, A M. (Hrsg.): Proceedings of the 3rd International Conference on Electronic Commerce and Web Technologies - EC-WEB 2002, Aix-en-Provence 2002. pp. 400-409.
- Mobile Banking Service ... (n.d.). *Krungthai Bank*, 2017. from http://www.ktb.co.th/ product/detail/618
- Research Methodology. (n.d.). Azevedo, L.F, 2017. from http://libguides.usc.edu/ writingguide/methodology
- Schierz, P.G., Schilke, O. and Wirtz, B.W. (2010). Understanding consumer acceptance of mobile payment services: an empirical analysis. *Electronic Commerce Research and Applications*, 3, 209-216.
- Schneider, Gary. (2013). '*E-Business*'. Cengage Learning The 2011 E-Commerce Survey. National Statistical Office http://web.nso.go.th.
- Thomas F.Quinn & Jean-Emmanuel Biondi & Anu Penmetcha. (2014) From bricks to click Generating global growth through eCommerce expansion. Deloitte.
- Toward an understanding of the behavioral intention to use mobile banking. (n.d.). *PinLuarn*. from http://www.sciencedirect.com/science/article/pii/S074756 3204000470.
- Varshney U. Vetter R. (2002). Mobile commerce: Framework, Applications and network support. *Mobile Networks and Applications*, 7(3), 185-198.



Appendix A: Questionnaire

Dear Sir/Madam

This set of questionnaire has been developed by College Management of Mahidol students to use for MGMG 697 Thematic Paper. The purpose of collecting data is to be able to analyze THE FACTORS THAT INFLUENCE CONSUMER USE THE MOBILE BANKING IN BANGKOK All data will be treated with high confidentially and used for educational purpose only. It will take about 5-10 minutes to finish. Please be assured that your response is strictly confidential and only aggregate results will be reported and used for educational purposes only. Please complete all question truthfully by mark " \checkmark " in the • space given below the following questions. Thank you for your participation.

There are 3 parts including in this set; P 1-3: General information P 4-13: Perceptions and Motivations P 14-18: Personal Information

Consumer Behavior - Financial Technology

Behavior of mobile banking user

* Required

How long have you been using the internet on mobile phone (including e-mail line facebook, etc.)? (คุณเริ่มใช้อินเทอร์เน็ตผ่าน ทางโทรมือถือ มานานแค่ไหนแล้ว?) *

- ◯ less than 1 year (น้อยกว่า 1 ปี)
- () Between 1-3 years (ระหว่าง 1-3 ปี)
- O Between 4-6 years (ระหว่าง 4-6 ปี)
- Over 6 years (มากกว่า 6 ปี)

2. How ofter do you use internet online via smart phone ? (คุณใช้ อินเทอร์เน็ด<mark>บ</mark>นโทรศัพท์มือถือในวันหนึ่งบ่อยแ<mark>คไ</mark>หน) *

- O Less than 1 hr per day (น้อยกว่า 1 ชั่วโมงต่อวัน)
- O Between 1-2 hr per day (ระหว่าง 1-2 ชั่วโมงต่อวัน)
- O Between 2-3 hr per day (ระหว่าง 2-3 ชั่วโมงต่อวัน)
- O More than 3 hr per day (มากกว่า 3 ชั่วโมงต่อวัน))

3. Reason to use the internet via smart phone (can select more than 1) (อะไรคือเหตุผลที่ทำให้คุณใช้อินเทอร์เน็ตบนโทรศัพท์มือถือ เลือกได้มากกว่า 1 ข้อ) *

	Search	engine	(ระบบสืบคันข้อมูล)
--	--------	--------	--------------------

- Chat or communication(E-mail Line IG FB) (พูดคุย สื่อสาร)
- Entertainment(Youtube Netflix Game) (เพื่อความบันเทิง)
- Purchase Goods and service (เพื่อซื้อสินค้าและบริการ)
- Job search (หางาน)
- Banking trasaction (Trandfer Paybill) (เพื่อชำระค่าสินค้า ค่าบริการ และธุรกรรม การเงิน)

	Other:				
--	--------	--	--	--	--

4. Have you ever ีused a mobile banking via Smart phone? (คุณ เคยใช้บริการ โมบายแบงค์กิ้งผ่านโทรศัพท์มือถือมาก่อนไหม) *

O Yes

O No go to question no.8(ไม่เคย ให้ข้ามไปข้อ 8)

5. Which mobile banking have you ever visited? (Please indicate) (โมบายแบงค์กิ้งของธนาคารใดที่คุณเคยใช้บริการมาก่อน โปรดระบุ)

Your answer

6. How did you know about Mobile banking service? (Can select more than 1 choice) (คุณรู้จักโมบายแบงศ์กั้งจากทางใด เลือกได้ มากกว่า 1 ข้อ)

- 🔲 Advertisement on Internet (ads) (โฆษณาบนอินเทอร์เน็ต)
- Radio/TV broadcasting (วิทยุ หรือ โทรทัศน์)
- Search engine (ระบบสืบคันข้อมูล)
- Family/Friend/Co-worker (คนในครอบครัวเพื่อน,คนรอบๆตัว)
- Bank (Booth activity,Poster) (บูธแนะนำการใช้งานในสถานที่ต่างๆ)
- Newspaper/Magazine (หนังสือพิมพ์ หรือ แมกกาซีน)
- Bilboar, Poster (สื่อป้าย หรือ โปสเตอร์)
- Other:

7. Have you ever subscribed to mobile banking (คุณเป็นสมาชิก ของ โมบายแบงค์กิ้งไหม)

No ไม่ได้เป็น

- 🗌 Yes Please specific (เป็น โปรดระบุ)
- Other:

8. Please rate expectation that need Mobile banking providing when you using (โปรดให้คะแนนความสำคัญในแต่ละข้อ ที่อยากให้ผู้ ให้บริการโมบายแบงค์กิ้งจัดหาให้) *

	High Important (สำคัญมาก)	Important (สำคัญ)	Somewhat Important (สำคัญ บ้างในบางครั้ง)	Unimportant (ไม่ สำคัญ)
Fast speed of access and service (ความรวดเร็วในการใช้ บริการ)	0	0	0	0
Security personal information (ความ ปลอดภัยในข้อมูลส่วน ตัว)	0	0	0	0
Security from Hacker or internet roberry (ความ ปลอดภัยจากโจรกรรม ทางอินเทอร์เน็ต)	0	0	0	0
Free or cheap in transaction cost (ราคาที่ถูก หรือ ฟรีค่า ธรรมเนียม)	0	0	0	0
User friendly (ไข้งาน ง่าย)	0	0	0	0
Variety of service (ความหากหลายของ บริการ)	0	0	0	0
Service center support (Emergency issue) (มีศุนย์ที่พร้อม แก้ไขปัญหาดลอด เวลา)	0	0	0	0

9.Please rate the your interest in basic function (within Banking industry) (กรุณาให้ค<mark>ะแน</mark>นความน่าส<mark>นใจของฟังก์ชั่นหลักด้านล่าง) *</mark>

	High important (สำคัญมาก)	lmportant (สำคัญ)	Somewhat Influence (มีผล บ้าง)	Not important (ไม่สำคัญ)
Balance checking (เช็คยอดเงินคงเหลือ)	0	0	0	0
Tranfering (บริการโอน เงิน)	0	0	0	0
Bill payment (บริการ ชำระคำใช้จ่ายต่างๆ คำน้ำคำไฟ,ต่า อินเทอร์เน็ต)	0	0	0	0
Loan request (ระบบ การภู้ยืมเงิน)	0	0	0	0
Emergency button (ระบบแจ้งปัญหา ฉุกเฉิน)	0	0	0	0
Buy Fund (LTF,RMF) (ระบบการชื่อกองทุน LTF,RMF)	0	0	0	0
News (มีช่องทางน่า เสนอข่าวการเงินทุกวัน)	0	0	0	0
Cardless ATM (ระบบ การกดเงินโดยไม่ต้อง ใช้บัตร ATM)	0	0	0	0
Foreign exchange service (ระบบแลก เปลี่ยนเงินสกุลตราต่าง ประเทศ)	0	0	0	0

10.Please choose the your interest without Banking service (Can select more than 1 choice) (กรุณาเลือกบริการเสริมที่น่าสนใจถ้ามีอยู่ ใน แอพพลิเคชั่น โมบายแบงค์กิ้ง เลือกได้มากกว่า 1 ข้อ) *

Restaurant recommendation (แนะนำร้านอาหาร)

🔲 Shopping online (for shopper & Buyer) (ช่องทางการซื้อและขายสินค้า)

🗌 Game (เกมส์)

🔲 Tax calculator (คำนวนภาษีประจำปี)

🔲 Variety (healthy tip, sport) (ข่าวสารเกี่ยวกับสุขภาพ การดูแลสุขภาพ)

- Revenue and Expense Note (บันทึกรายรับรายจ่าย)
- Other:

11.Please rate influenced factors to use Mobile banking (กรุณา ให้คะแนนของปัจจัยในการใช้ โมบายแบงค์กิ้งแต่ละปัจจัย) *

	High important (สำคัญมาก)	Important (สำคัญ)	Somewhat important (สำคัญ บ้างในบางครั้ง)	Not important (ไม่สำคัญ)
Convenience (ความ สะดวก)	0	0	0	0
Fast (less time) (ความเร็ว)	0	0	0	0
Security (ความ ปลอดภัย)	0	0	0	0
Less expense (ค่าใช้ จ่ายที่ถูก)	0	0	0	0
Consistency (ความ มั่นคง)	0	0	0	0

12.Please rank influenced factors to not use Mobile banking (กรุณาให้คะแนนของปัจจัยที่ทำให้ไม่อยากใช่โมบายแบงค์กิ้ง) *

	High important (สำคัญมาก)	Important (สำคัญ)	Somewhat important (สำคัญ บ้างในบางครั้ง)	Not important (ไม่สำคัญ)
Lack of confidence in system (security issue) (ขาดความ รัดกุมในระบบรักษา ความปลอดภัย)	0	0	0	0
Concern the service fees (ไม่ขึ้แจงค่า บริการที่ชัดเจน)	0	0	0	0
Doubt the personal information (ข้อมูล ส่วนตัวถูกเผยแพร่)	0	0	0	0
Need the physical evidence (ขาดหลัก ฐานที่เป็นเอกสารลาย ลักษณ์อักษร)	0	0	0	0

13.Please rate the activity that can attract you to use the mobile banking (โปรดให้คะแนนกิจกรรมที่จะส่งผลให้ เพิ่มความน่าสนใจในโม บายแบงค์กั้งมากขึ้น). *

	High Influence (มีผลมาก)	Somewhat Influence (มีผลบ้าง)Influence (มีผล)	Somewhat Influence (มีผล บ้าง)	No Influence (ไม่มีผล)	
Banner and Website (โฆษณาในเว็ปไซด์)	0	0	0	0	
Booth acivity to give the knowledge (มุธกิจกรรม)	0	0	0	0	
Advertisement (โฆษณา ทางทีวีและหนังสือพิมพ์)	0	0	0	0	
Free internet traning (จัดเทรนนึ่งฟรี หรือมีวีดีโอ สอนทางยูทูป)	0	0	0	0	
Free internete access (Wifi) (ฟรีไวไฟขณะใช้ งาน)	0	0	0	0	
Invite the restaurant to apply QR code with special promotion (มี โปรโมชั่นพิเศษร้านอาหาร สำหรับคนที่เป็นสมาชิก)	0	0	0	0	
14.Is your gender	? (เพศของ	คุณ คือ?) *			
🔲 Male (ผู้ชาย)					
🔲 Female (ผู้หญิง)					
15.How old are you? (อายุของคุณ คือ ?) *					
O Under 22 years of		Teo N			
O 22-30 years old (
O 31-40 years old (· ·			
41-50 years old (Gen X) (ระหว่า	ง 41-50 ปี)			
O 51-60 years old(Baby bommer) (ระหว่าง 51-60ปี)					
O ver 60 years old (มากกว่า 60 ปี					
16.Please indicate your education background. (โปรดระบุขั้นการ ศึกษา) *					

- O High school or lower (ประถมศึกษาหรือมัธยมศึกษา)
- O Bachelor degree (ระดับปริญญาตรี)
- O Master degree (ระดับปริญญาโท)
- O Docter Degree (ระดับxปริญญาเอก)

17.Please indicate your current monthly income (โประบุรายได้ต่อ เดือนของคุณ) *

- O Lower 15,000 baht (ต่ำกว่า 15,000 บาท)
- ◯ 15,001 30,000 baht (ระหว่าง 15,000-30,000 บาท)
- 30,001 45,000 baht (ระหว่าง 30,001-45,000 บาท)
- ◯ 45,001 60,000 baht (ระหว่าง 45,001-60,000 บาท)
- More than 60,000 baht (มากกว่า 60,000 บาท)

18.Which of the following jobs best describs your current career or position? (งานที่คุณทำเกี่ยวข้องกับ) *

- O Unemployed (ไมได้ทำงาน)
- O Student (นักเรียน นักศึกษา)
- O Company or public company (ทำงานในบริษัทเอกชน)
- Government and public adminstration (เป็นข้าราชการ หรือทำงานใน รัฐวิสาหกิจ)
- O Family business (ธุรกิจส่วนตัว)
- O Other: