

**FACTORS AFFECTING CUSTOMER'S DECISION TO USE
GROCERY MOBILE APPLICATION IN BANGKOK
METROPOLITAN: A CASE STUDY OF TOPS SUPERMARKET**



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Thematic paper
entitled
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ABSTRACT

Customers nowadays have ability to perform transaction online, especially shopping transaction that they can shop all the time and everywhere; and in a truly global online marketplace, products can easily be purchased from retailers. Since mobile grocery shopping has been increasingly popular around the world, which many retailers are now developing mobile application as a new approach that was introduced as a tool for creating such affect to customers. Tops supermarket is the largest supermarket chain in Thailand that the company is more customer-focused to meet the wants and needs, and hopefully excess expectations of its customers.

This study is aimed to study and evaluate the factors affect customer's decision to use Tops mobile app in Bangkok Metropolitan. The research was conducted on 12 respondents using qualitative method for collecting the data by in-depth interviews and observations to explore customers' perception in deeper level that involve in the details of understanding. In addition, the result of this research shown that perceived ease of use and perceived usefulness have an impact on customer's attitude towards Tops application.

KEY WORDS: Tops Supermarket/ Mobile Application/ Mobile Grocery Shopping/
Perceived Ease of Use/ Perceived Usefulness

37 pages

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CHAPTER I

INTRODUCTION

1.1 Background of the Study

The research topic of this thematic paper is about factors affecting customer's decision to use Tops supermarket's mobile application in Bangkok Metropolitan. It is often said that retails never stop moving. The Internet of things, artificial intelligence and breakthrough innovations has the ability to disrupt the retail industry. Shopping online through mobile device has been increasingly popular around the world, even for the groceries and other FMCG products. Referring to the Fortune survey (Farber, 2016), U.S. shoppers made their online purchases 51% of their grocery shopping, compared to 48% in 2015 and 47% in 2014. Furthermore, 44% of smartphone users made their purchases through their devices, compared to 41% a year ago. These statistics show how well customers are responding to grocery apps developing.

Thailand, the country is Asian's second-largest smartphone market that shows that more than 90% of Internet users use their smartphone to go online (National Statistical Office of Thailand, 2017). Also, 43.8% of Thai people will be smartphone users by the end of 2017, with over half the population using smartphones by 2020 (Kressmann, 2017). When analyzing the trends of online shopping in Thailand, it might be the biggest year for the growth of mobile apps and digital content thanks largely to the arrival of 4G wireless broadband technologies. Since Thai online grocery market has been growing rapidly, many grocery retailers are now exploring the capabilities of mobile marketing and they become successful in developing their mobile apps.

Recently, Tops supermarket becomes the largest supermarket chain retail in Thailand, which is operated by Central Food Retail Co., Ltd., who has uplifted customer's experience by utilizing strengths of the company to develop businesses through online platforms. Moreover, Tops supermarket is one of the key business units under Central that likely aware of the new challenges, and need to differentiate from the competition through innovation as great as it ever has been. The company introduces

Tops mobile app to deliver a flourishing Omni channel experience to meet the wants and needs, and hopefully excess expectations of its customers. However, mobile app usage is a big important factor for responding to a rapid change in consumer's behavior in the 4.0 era.

1.2 Research Questions

1. What are the key factors that motivate customers to download and use Tops application?
2. Why would customers not shop online grocery through Tops application?

1.3 Research Objectives

1. To study and evaluate the factors influencing customers to download and use Tops application.
2. To identify the primary barriers to trial of grocery shopping application.
3. To study customer's attitude towards grocery app, especially Tops supermarket, which is the biggest supermarket chain in Thailand.

1.4 Research Scope

In this research, the data collection from qualitative methodology will be used. It intends to in-depth interview 12 respondents, classify by two segments: 6 respondents who have experienced of Tops mobile app and 6 respondents who have never experienced of Tops mobile app before. The respondents selected to live in Bangkok Metropolitan by age 22-35. This research had been conducted from October to December 2017.

1.5 Expected Benefits

At the end of report, there will be recommendations that can be used to develop grocery app in Thailand, especially for Tops supermarket. The result will be practical and knowledgeable for the companies that are interested in investing in mobile marketing especially in native mobile app. The useful information can be the guideline for the companies to study customer's attitude towards grocery app.



CHAPTER II

LITERATURE REVIEW

This chapter consists of 2 sections. First section describes the mobile application in term of an evolution of mobile app, characteristics of grocery mobile apps and general information of Tops app. Another section examines the theories of Consumer Decision-making Processes and Technology Acceptance Model.

2.1 Mobile Application

2.1.1 Mobile Application Evolution

Once upon a time, the popular functions of mobile phones were text messaging and voice calling whereby the basic apps can be widely classified by visual and audio (Clark, 2014). First is visual, the main components are including data, text, photo and video. Second is audio, the primary components are voice, music and conversations. The variety of mobile devices provides different basic applications. Since the advent of the iPhone a decade ago, users could experience the functionality of personal computer on pocket-sized devices as “smartphone” and their associated mobile software as “application”

Customers in today’s world are on the move and they are using mobile platforms to get there. Whether they use mobile phones, tablets, or other mobile devices they have all the information they need. In the recent years, applications are increasingly used in our daily life (Rakestraw, Eunni, & Kasuganti, 2015) and it drives the majority of media consumption that not only communicates, but helps to learn, earn, and entertaining. These are made possible by the development of mobile app. Progressive Grocer shows 43% of new generations in U.S. as millennial aged starts to use mobile app to shop their groceries, which the app either help them prepare a list, search for coupons or check for store sales ahead of shopping (Dance & Agents, 2016).

2.1.2 Characteristics of Grocery Mobile Application

“For small businesses and big corporate companies alike, mobile is the latest frontier” (Garber, 2012). Yet rather than simply developing a mobile-friendly version of business official website or adding a perfectly e-commerce productivity to the mobile user experience, more and more entrepreneurs are already played into the mobile market by developing the mobile apps. But not all apps are made equal. Here are what the key features that developers should be looking out for.

2.1.2.1 Rich in UI and UX

As important as the mobile app trends are, the retailers should take this opportunity to stand in front of customers by making sure usability is the top issue to enhance customers experience that are pleasant, effective and enjoyable. Apps should rich in “user experience” (UX) and “user interface” (UI) so that the shoppers can perform seamlessly while using the app for their online purchase. To start with UX as a priority to concern, which is how customers feel using and interacting with the apps. Developer has to ensure the feedback after users click the buttons on screen; it is unlikely good if there is no interaction from the users.

Besides UX, UI is about personality of the app such as style, color, font, size and moods and tones. Creates user-friendly interface while design a minimal feature with good visual to users engaged (UX Planet, 2017). Multiple tasks can be done and fewer steps can be implemented minimize load times to prevent the shoppers from quitting the apps.

2.1.2.2 Categorization of Products

To make it easy and convenient for the shoppers to search and pick their final products, the app should be designed to have categories, filters and sorting. For example, there should be different categories for health and cares products, fresh foods or household products.

2.1.2.3 Easy Order Placement/Item Availability in Real Time

It is important to make it easy to add products to shopping cart and option to “pay now” or continue shopping. After placing the orders, make the tracking number available immediately with delivery time. Another feature is to show item availability in store. If items are sold out, inform them when those will be available and in what numbers (Gray, 2017).

2.1.2.4 Provide Variety of Payment Methods

In the grocery app, retailers integrate the different payment methods including credit card, debit card, mobile wallet or cash on delivery. More importantly, a safe and secure online payment should be provided in the app to gain customers' trust.

2.1.3 General Information of Tops Mobile Application

Grocery app development increasingly becomes popular due to its ability to improve customer's data relationship management, and hopefully it will become the primary source of competitive advantage in the future. Tops supermarket is the leading supermarket chain in Thai market that has been operated since 1996, which the brand now is widely recognized as a strong grocery brand name nationwide (Central Food Retail Co., Ltd., 2017). Tops app introduced by Central Food Retail Co., Ltd. in 2012 for both iOS and Android platforms in order to do an extension for its e-commerce (www.tops.co.th). In 2017, Tops redesigns its app for better customers' experiences align to Omni channel marketing (Figure 2.1).



Figure 2.1 Tops Mobile Application 2017

To convince the potential customers to download the app, Tops also gives an interesting description to highlight all the awesome features, functionalities, incentives and benefits as following (Apple Inc., 2017) (Google Play, 2017).

2.1.3.1 Products Quality

Tops said all sources of merchandise are the best from all over the World and in Thailand that discover 15,000 fresh groceries and various products available with quality and freshness guarantee. Refer to Tops's slogan "Fresh...every day, every item", company has to ensure that customers will confidence and trust in quality of products from their stores. Tops is willing to refund money if customers are not satisfied by the quality for freshness in order to aim its mission to get 100% customer satisfaction for any online purchase (Central Food Retail Co., Ltd., 2017).

2.1.3.2 Delivery Service

Tops goes an extra mile to promise for on-time delivery that customers are allowed to take an advance order up to 7 days in advance and they will receive their order within the same day when the orders are placed before 1.00 p.m. Moreover, Tops online provides free of charge deliver with a minimum purchase of 888 baht.

2.1.3.3 System Quality

The app provides safe and secure shopping to make a long-term success among its customers. To be more stable and more reliable in customers' eyes, Tops usually updates the app to remind customers that the system is continuing to improve for better experience.

2.1.3.4 Promotions and Exclusive Offers

Customers have a chance to get personalized coupons and exclusive offers by downloading and using Tops app. Even discount or trial coupons can be redeemed at point of purchases both in-store and online store.

2.1.3.5 Multi Payment Options

Since Tops does not have its own mobile payment app, Tops tries to give a various ways for making customers convenience. It is easy for customers to pay by cash on delivery or credit card on delivery; where customers pay only when they receive their shipping package. Also, credit card payment on the app is available for anyone.

2.2 The Consumer

2.2.1 Consumer Decision Making Processes

A model of the purchasing decision processes has examined by many marketing scholars. In this framework, it does not focus only the interest of customers till they take an action to purchase the product, but aims to see post-purchase action of customers. A research by Kotler & Keller (2009) shows the 5 stages of consumer decision-making processes in purchasing a product (Figure 2.2).

2.2.1.1 Needs and Awareness

The first stage in the customer decision process refers to customers' needs and problems as internal stimuli or external stimuli. For instance, hunger and thirst are internal stimulus and the awareness of brands and products are external stimulus. The advertiser needs to launch an interesting advertising or utilize public relations to grab attentions and build awareness among target customers in this cognitive stage. The result will be good when customers see an advertisement and pass the information by word of mouth (Kotler & Armstrong, 2008).

2.2.1.2 Information Search

In the second stage, customers are driven to make an effort to do a research for the products they want to purchase. There are several ways to obtain further information are that includes four sources. First, personal source that is when family or friends give recommendations from their experiences. Second, commercial sources that are advertising, website, or displays. Third, public source, such as mass media or consumer-rating organization. Search Engines could become popular research tools in Millennial aged for doing the research and finding the answer, for instant. The last one is experiential source such as handling, testing, or using the product.

2.2.1.3 Evaluation of Alternatives

The third stage is good to influence customers to choose a brand. After customer has done the research, they will evaluate all the alternative brands that have ability to deliver benefit to solve their problems or meet the needs they seek. This process takes many different routes because customers might not evaluate their choices in the same logical way. Someone makes their decision by having friends or others to

help and they also might shop on impulse and just rely on intuition rather than using careful calculations and logical thinking (Kotler & Armstrong, 2012).

2.2.1.4 Purchase Decision

Once the evaluation process has ended and the customer is now ready to seek out the best deal in this stage. In fact, every customer will not take the same action, which it is the challenge of salesperson to “call action” and convince him or her to finish with a purchase. Philip Kotler (2009) studied and found that the disruptions of final purchase decision come from the attitudes of others and unexpected situational factors.

2.2.1.5 Post-purchase Behavior

This final stage in the process is more concerning to the marketers that it is very important to make sure the product exceeds the customer expectations. The customers will compare products with their previous expectations that they either satisfied or dissatisfied. Refer to Philip Kotler (2017), “people who purchase the brand must have liked the brand before”, this shows that an action of repurchase would occur by customers’ experience that they decide whether the product is worth to purchase again or not. Most of retailers use “retaining principle” to retain the product and maintain loyalty customers.



Figure 2.2 Consumer Decision Making Processes

2.2.2 Theory of Technology Acceptance Model (TAM)

This section is to examine some key factors that hinder or enable greater mobile usage in the retail environment. Technology Acceptance Model (TAM) is one of the most widely applied models to help understand human user behavior and explain how people accept in new technologies. Davis (1989) studied and found that there are two different beliefs “how useful something is” and “how easy it is to use” that can determine human’s attitude. Then the attitude determines their intent and finally intent will be a great factor to drive their behavior. TAM points out that perceived usefulness and perceived ease of use affect the intention to use (Figure 2.3).

2.2.2.1 Perceived Usefulness

Normally people believe in a product or service that could increase their job performance as a key enabler. Perceived usefulness classified by five variables influence customers to go for a new mobile apps purchase decision factors. First of all, subjective norm refers the perception and belief that the important person or group of people likes family, friends and colleagues will approve or disapprove a particular behavior. For example, in case of online grocery shopping, some customers may have a little knowledge and experience on online platform, so they may be more comfortable and willing to purchase groceries online if their family members and friends approve this mode of shopping. Secondly, self-image defines the degree to which of use innovation is perceived to move up individual status in society. It is not only how you dress or the body language you present, but the technology you adopt can be one tool to help others judge you easier. Thirdly, information is one of important tools to describe brand identity and brand creditability, which the information structure on app should be clear, useful, well organized and effectively presented in order to enhance customers’ trust.

Moreover, system quality plays an important role for continuously improving the quality of output, which its primary objective is to ensure that the app can provide the secure of use, response time, availability and stable, which in, the result of better customers’ satisfaction. Service quality is another factor in cognitive process in customers’ perception. There are 3 dimension of service quality, namely m-commerce quality, value-added services and customer support services.

2.2.2.2 Perceived Ease of Use

Accordingly to the definition by Davis, Bagozzi and Warshaw (1989), “the degree to which a person believes that using a particular system would be free from effort”. Yet, the perceived usefulness is clearly important and perceived ease of use factor is even more important. Most of people continue using technologies when they have more system familiarity or experience enjoys the process of using them. In this section identifies the two dimensions of perceived ease of use to user acceptance of mobile app.

First of all, “control dimension” defines controllability, operability, flexibility and ease of use. Refer to UX and UI that customers who are experienced and familiar with the app are more confident to use and control the app that they may be willing to tolerate a difficult interface in order to access functionality that helps them on online shopping. However, complexity and lack of user friendliness could be barrier for using the app, which developer should create a simple app in order to enhance usability and customer experience towards the app that even newbie users can use it easily.

Another dimension is “learnability dimension”. In this sense, here is the challenge of many retailers to educate customers to understand and perceived enjoyment of the apps. Knowledge level is not the same for every customer that sometimes they need to get information about the app, also the brand needs to support and teach them “what the app is”, “how to install” or “how to use it”. In addition, complex and difficult infrastructures might be causes of problems among customers who have no knowledge about the app before. So, lack of knowledge could limit the adoption and use of mobile apps.

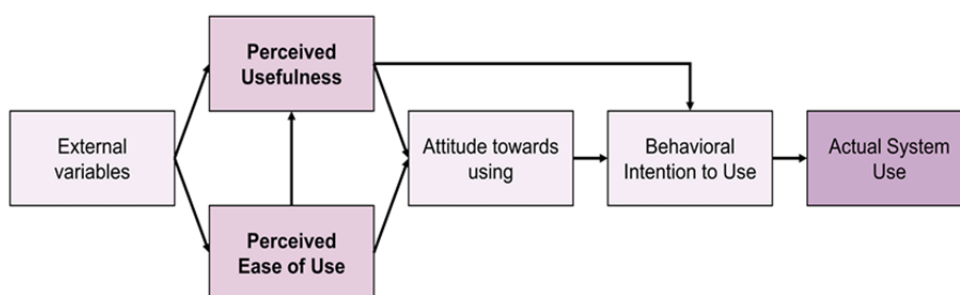


Figure 2.3 The Technology Acceptance Model (TAM)

2.3 Benefits of Online Grocery Shopping

Online grocery shopping refers to ordering grocery products through online platform that retailer usually takes care of selecting and also doing delivery of the goods to the customer. Many retailers provide several channels for expanding the options and convenience by allowing customers to access the store via Internet and shop the products 24/7. Furthermore, since mobile app is another platform of online shopping by doing sync with online website. Convenience valued is important for retailer's app that it is potentially raise the competitiveness of company over time. For example in Japan, retailers have been creating QR code to serve their customers. Upon scanning a QR code, customers can either open the link then automatically jump to a target mobile site without typing in the full website address, or tap "more" to save the content or share it via email or social media (Okazaki & Romero, 2010). Another factor is paperless, which customers do not need to carry physical coupons to present at cashier for redeeming anymore.

Not only convenience, but also time saving is the main objective to drive customers' intention to shop online. They do not drive to supermarket and stuck in traffic or parking. Also, shoppers today would like to compare and research the products and prices on online to get the best deal, which they sometimes get cheaper price from manufacturer without middleman being involved.

2.4 Summary

The framework of this research is to understand and explore customer's attitude towards Tops app. The Technology Acceptance Model (TAM) will be applied to study and understand the customer's attitude based on "perceived usefulness" and "perceived ease of use", which affect behavioral intention to use the app. The following conceptual framework will be applied in this study.

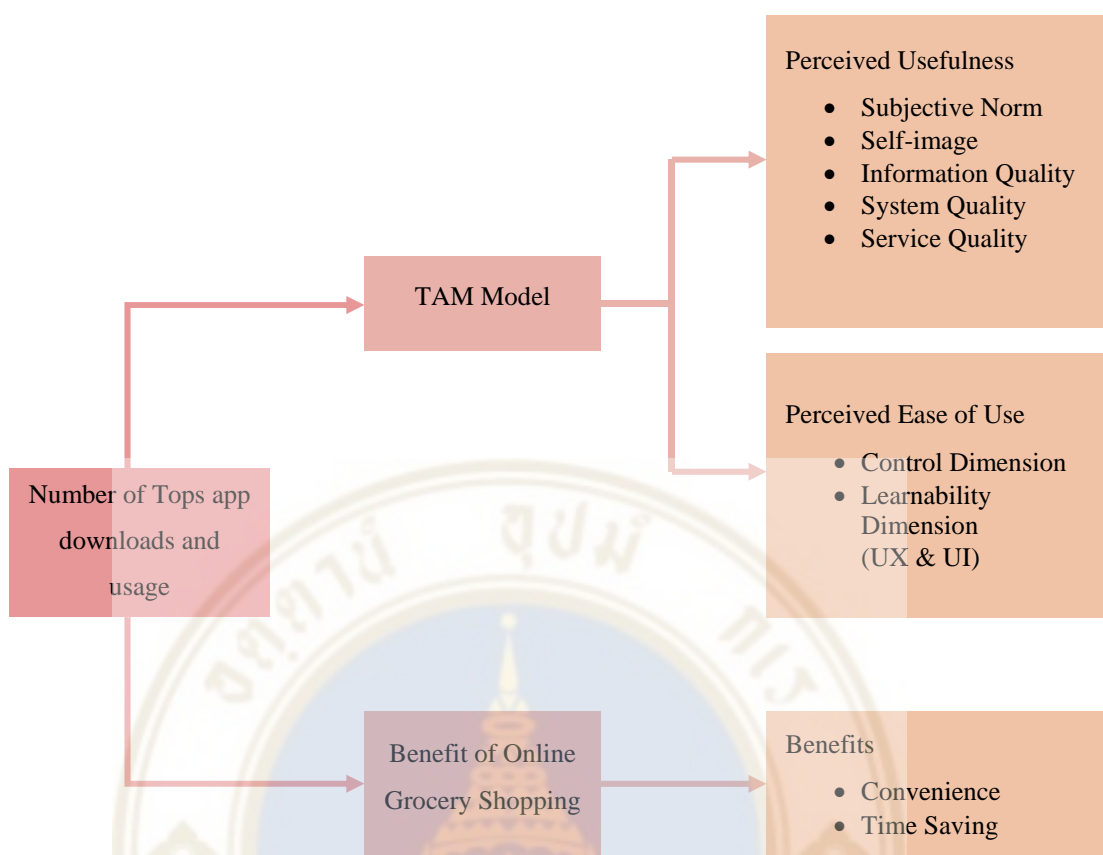


Figure 2.4 Conceptual Framework

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The objective of this study is to study and evaluate the factors affect customer's decision to use Tops mobile app in Bangkok Metropolitan. The research will use qualitative method for collecting the data by in-depth interviews and observations. Qualitative approach is useful for exploring customers' perception in deeper level that involve in the details of understanding. In-depth interviews in a one-to-one setting for the total of 12 participants will be conducted.

3.2 Data Collection and Methodology

3.2.1 Populations

The number of Thai users who use Internet is 67% while mobile subscription is at 133% of total population in 2017 (ASEAN Up, 2017). The majority of active Internet users live in Bangkok Metropolitan areas where the research will focus on. Millennial people are the most mobile that there is an opportunity to reach the potential target to gain some useful information and insights.

3.2.2 Sampling

The plan is to conduct 12 sample sizes with in-depth interview by focusing on the respondents of early majority in millennial generation who play a big role in the modern market. The researcher will interview participants who live in Bangkok Metropolitan area, age 22-35. They are equally classified into two groups base on respondents' experience towards Tops mobile app. The sample group will focus on 6 respondents who have experienced of the app and 6 respondents who have never experienced the app before.

3.2.3 Data Collection

To ensure the collected data is good enough and aim to reach the objectives that data collection will be gathered during the interview conducted to explore on customers' feeling, perception, attitude and behavior towards the perceived usefulness and perceived ease of use when using Tops app. The data collection methods are interviews like conversations by using "interactive competence" to pay attention to interviewees and ready to open up the stage to make them feel more comfortable talking. The interviewer will introduce and give a clear definition of mobile app; especially grocery app to respondents who never have experience with. The opening questions will begin with regard to respondent's perception and attitude toward using Tops app. The interviewer will make a few questions in short, and encourage interviewees to share their opinions and the level of satisfaction on the app. hopefully, the interviewers will be able to get useful recommendations from users.

During the interviews, observation is another mode of data collection. Usability testing is the main purpose for evaluation of learning without first reviewing any instructions. To see their interaction towards Tops app and explore their attitudes about "how useful the app is" and "how easy the app is to use", all participants will be requested to use the app for online grocery shopping that researcher will give a short shopping list of 7 destination items before start shopping. The shopping list includes a variety of common categories that most of customers purchase; fresh meat, strawberry, UHT milk, snack, soft drink, liquid detergent and shampoo. Also, researcher will ask them to share their opinions and then give the question them that now they have used the app whether it makes them more likely to start using it in the future.

To study and evaluate the factors influencing customers to download and use Tops mobile app, the researcher would ask interviewees who stand in a group of users who have experience with the app to think back to the specific moment that they downloaded the app, and then ask in depth about the context at that time.

3.3 Instrument

The interview sessions will be conducted and then transcribed for analysis and part of them will be used for the presentation.

The following questions will be used to gather information from the participants. The questions are structured into four parts.

- Part 1: Personal Information

1. Age
2. Gender
3. Occupation

- Part 2: General information about grocery shopping

1. How often did you go to supermarket and do grocery shopping?
2. Which channel do you prefer to shop for groceries between online store and brick and mortar stores? Why?
3. Have you ever grocery shopped online? If yes, which channel did you use to make a purchase? (E.g. mobile device, personal computer). And why did you choose to use that channel?
4. Do you have any grocery online shopping apps in your smartphone? Which brand? Do you happy with that app?

- Part 3: The Factors Affect Customer's Decision to Use Grocery App

Please rate yourself on a scale of 1-3, with 3 having a high concern and 1 having a low concern about following issues;

Table 3.1 The assessment level concern about issues

Information Quality	1. Low	2. Moderate	3. High
System Quality	1. Low	2. Moderate	3. High
Service Quality	1. Low	2. Moderate	3. High

- Part 4: Perceived Usefulness and Perceived Ease of Use Perception

1. Thinking about downloading Tops app for the first time, why did you download app at the moment? Did anyone motivate you to download the app? (E.g. family, friends, colleagues, yourself)

2. Have you ever seen Tops app ads before? Where did you see the ads?
Did it encourage you to download the app to use?
3. Do you think that sales promotion or exclusive offer could convince you to use Tops app?
4. What do you like about Tops app?
5. What do you dislike about Tops app?
6. Do you have knowledge about Tops quality guarantees and services such as home delivery service and personal assistance service?
7. Do you think Tops app is easy to use?
8. Do you think Tops app is making your life more convenience?
9. Do you think Tops app is building your image better?
10. Do you trust in Tops? And would you recommend to your family and friends to shop at Tops via the app?
11. Do you have any comments for Tops app?
12. Is there the opportunity for you to use Tops app in the future?

CHAPTER IV

DISCUSSION AND CONCLUSION

The interview was carried out on 12 participants, which separated into two groups; Tops app users and non-users. The findings were aimed to answer objective of the study to clarify what are the key factors that motivate customers to download and use Tops mobile app, and also find out what could be best practice to make them more comfortable to adopt grocery app in the future.

All of respondents live in Bangkok Metropolitan area that is the potential targets because most of them tend to have less time to shopping. There are 3 main dimensions that are relevant in this research and must be asked to every participant, which are attitude towards the app in term of perceived usefulness, perceived ease of use and online shopping benefits.

4.1 Demographic Information

Demographic profile of participants defines as gender, age and occupation.

Table 4.1 Participants Information

Users				Non-Users			
No.	Gender	Age	Occupation	No.	Gender	Age	Occupation
1	Male	27	Officer	7	Male	28	Officer
2	Male	34	Officer	8	Male	32	Business Owner
3	Female	26	Officer	9	Female	24	Student
4	Female	28	Officer	10	Female	26	Officer
5	Female	31	Housewife	11	Female	27	Officer
6	Female	32	Officer	12	Female	28	Officer

The target group for this research was selected to millennial generation, between ages of 22-35 years. Primarily, younger customers are known to be more active on Internet than the older customers. In this research approach, the researcher collected the data from 6 respondents who have experienced of the app and 6 respondents who have never experienced of the app before. For gender of respondents, it is researcher's intention to focus on female respondents more than male as women usually do the grocery shopping in majority of Thai families; therefore, 8 respondents are female and the rest of 4 are male.

At the beginning of interviews, to measure how much participants both Tops app users and non-users are familiar with the app, which interviewer asked the question "Do you usually use mobile app for online shopping?" Most of the interviewees responded that they normally made online purchase via mobile app at least 1-2 times per month and some of them used it more than 4 times per month. They used shopping app for various reasons such as convenience, promotions, best deal and time saving. Also, mostly destination product categories they usually purchased on native apps are lifestyle product, fashion product and food product.

4.1.1 Users

For participants who are experienced with Tops app, the researcher found further about grocery shopping behavior of 6 participants. From the interviews, 4 out of 6 respondents do grocery shopping though both offline and online for 4 times per month and the rest of 2 respondents shop 2 times per month that the top most selected grocery brands of respondents are Tops supermarket and Villa market. All of the participants have Tops app on their mobile phones and grocery shop via the app. To see customers' awareness towards the app, most of users can see the ads several times from social media, direct mail and in-store medias.

Furthermore, researcher asked all respondents to show grocery apps in their mobile phone and found that 3 out of 6 users only have Tops app. The main reason is that they do not want to keep unnecessary apps due to their limited memory space. However, 2 out of 6 respondents have many grocery apps that include Tops, Tesco Lotus and Honest Bee, the partner of Villa market on their screen. And the last one, she installed 2 apps; Tops and Tesco Lotus. They own different apps to compare products and their

prices as the main reason. Interviewee6 said, “Nowadays, the grocery retailers try to be the number one to their customers’ mind that they usually convince us to do shopping from their stores. I have many supermarket apps on my phone to check and order the merchandises, but I would prefer Tops app because they provide quality import products that others do not sell. I decided to download Tops app because they give me 100 The 1 Card points and 10% discount coupon for grocery shopping included import groceries in my wish list”.

4.1.2 Non-Users

According to the interviews, researcher found that the frequent of their grocery shopping classified into 3 levels; 4 times per month, 2 times per months and 1-2 times per month.

All respondents have experienced with Tops, but never experienced with ecommerce. Also, most of them never heard about Tops app while 1 out of 6 used to see the ads of its competitor likes Tesco Lotus. Interestingly, researcher found that 2 out of 6 non-users have been trying to shop grocery via online store (www.tops.co.th), but they gave up because they never had any experiences with registration before and they still do not know they could continue shopping.

4.2 Perceived Usefulness

4.2.1 Subjective Norm

All of users are requested to think to the first time they download Tops app, who motivated them to download the app? From the interviews, interviewee2, 5 and 6 are interested the app because of family. Interviewee5 said, “As I am living far from Tops branch that my family and I often go to shop. My husband always complains about the traffic and sometimes they stuck in in-store traffic, which I try to find a solution to avoid that. I decided to download Tops app and think that it would be a good idea for my family to do online grocery shopping”.

Interviewee1 and 3 are interested the app because of their colleagues. Interviewee 3 said, “It would be good for our team that we use the app for ordering snack and beverage

on someone birthday party. My colleague and I usually busiest for every working day, which I think it could make us more comfortable to make an order during lunch break via the phone instead of PC on the desk”. And the rest of user, she decided downloaded the app by herself, which she walked-in to store and see the ads on digital screen.

After researcher requested non-users to try the app, and ask them about their thoughts. Most of them have the same feedback. They cannot imagine that people would think that purchasing grocery online through the app is a good idea because they normally go to department store on weekend with family, which it is not difficult for in-store shopping.

4.2.2 Self-image

According to self-image defines the degree to which of use Tops app is perceived to move up individual status in society. Since Tops is one of the most widely popular brand in Thailand, which is positioning premium supermarket. Most of respondents trust in the brand, but they do not believe the app can enhance the image or move up their status. Occupation could affects the respondents’ attitude as interviewee5 said, “As I have a responsibility to manage my family’s home and do not do any business, which I do not concern about the image I get from using the app. Unlike economic analysts, they need to follow economic news and trends that most people in society more likely think finance apps users are smart and reliable person”.

However, interviewee4 who has only Tops app on her mobile phone said, “If I only had a chance to download grocery app, I would select Tops. As I used to work in supermarket industry and I think Tops brand is standing for a premium supermarket that I prefer to shop their merchandises and usually do repurchase. At first time I see the app, I think it seems suitable to me”.

4.2.3 Information Quality

Each of respondents has various rates on a scale of having a concern about information quality. Five of users rate in “high concern” and the rest rates in “moderate concern” as same as the proportion of non-users (Table 4.2).

Information quality is the primary key to drive the perceived value and usefulness. Information must be ready to serve customers who seek more details of items

or promotions. Category could use to present the relative position of the information, and merchandise is one of information that the app should classify all products into categories.

From the interviews, most of users were unsatisfied towards Tops app due to unclear items' information, lack of instruction and poor-organized categories. Four users and three non-users shared the same opinion about the organization of the app.

Interviewee4 said, "At first time for Tops app, I tried my best to do grocery shopping, and biscuit is my destination item. I started my journey at menu tab, and then I selected 'shop by category'. I faced many sub-categories and I was not sure where the biscuit is? Its categories are duplicated that I found many brands of biscuit in different sub-categories such as ready to eat, fresh food and snack & confectionery. At that time, I wanted to see more details of each brand but they were not available".

Also, a side of non-user, interviewees10 suggested that, "The app should provide clearer products' information that it is very helpful for most people who focus on healthy foods. For example, someone prefers low-carb that they would compare several items base on ingredients and nutrition facts".

Even most of respondents answered negatively about information structure on app, but also all 12 respondents agreed that the Tops app is one of readable apps. Interviewee11 said that, "The app has nice visual and red color is good for representing the brand. Also, dark text on a white background to display their information is easy to read, so I like it". Another comment from interviewee12, she was impressed by the various highlight products such as 'New in', 'Red Hot' and 'Buy 1 Get 1 Free' on home page, which the banner was outstanding and clear.

Table 4.2 The Factors Affecting Customers' Decision to Use Grocery Application
(A scale of 1-3, with 3 having a high concern and 1 having a low concern)

Users				Non-Users			
No.	Information Quality	System Quality	Service Quality	No.	Information Quality	System Quality	Service Quality
1	H	M	H	7	H	H	H
2	H	H	H	8	H	H	H
3	M	H	H	9	H	M	M
4	H	M	H	10	H	H	M
5	H	M	H	11	H	M	M
6	H	H	H	12	M	H	M

4.2.4 System Quality

In terms of system quality, there are various reasons that make participants concern about. The interviewer asked all 12 respondents to the quality of the system to see how much they concern about system quality. The result shows 3 users rate in “high concern” and the rest rates in “moderate concern”. Whereas it shows 4 non-users rate in “high concern” and the rest rates in “moderate concern”.

As the primary objective of system quality is to ensure the app can provide the secure of use, response time and stable. According to security is an important role to ensure that user’s information will be safe. The respondents’ perception towards the app was quite well, which the app would be allowed only members who already had an account to make an order. The researcher found that some respondents trust in Tops brand, but they do not quite trust in its system. A female non-user, aged 26, who did not have Tops app in her mobile phone, she said that, “As researcher asked me to try on grocery shopping via Tops app, that I think the waiting time while adding items to cart was taking long time, and I am quite not sure what I am going purchase. Unlike other shopping app likes Lazada, which I usually use the app for buying my outfits. Lazada app is normally quick”.

Stable is one of sub-dimensions in system quality to support speedy system responses to user’s interaction. One of them used to search a store location on the app, which he pin Thonglor branch as his destination. Unfortunately, the app did not work and then it restarted itself. Moreover, he also shared his experience about response time that he used to spend several minutes for getting the direction. Since Tops app did not have its own function to direct a traveler, which Tops sent user to continue at Google map. There are the reasons why he was concerned about stable and respond time.

However, right now Tops app is available for both iOS and Android platforms. Most of users were informed when Tops updated its app. It may sometimes require users to restart the app for stable improving. A female user shared that she has experienced with Tops app since the first launching and she thought the latest version is stable most.

4.2.5 Service Quality

A service refers to a process, that is, need to be run for the execution of particular program. There might be required more than one service to run for a single

program. Furthermore, service quality is another factor in cognitive process in customers' perception. Refer to the findings, shows all users were highly concerned about service quality while 2 out of 6 non-users were agreed with.

In a Tops app study, service quality measured by m-commerce quality, value-added services and customer support services to create customers' satisfaction. Firstly, Tops invests in the native app to expand the existing e-commerce, which results in revenue increased. When asking what factors they mostly concerned of online shopping, most of respondents answered punctual delivery as the first concern and accurate ordering as the second concern.

In case of value-added service that researcher found something interesting about delivery service. Most of users were aware about Tops guarantees in term of product quality & freshness and online services such as home delivery service while non-users were not aware at all. However, three users and five non-users are more concerned about high-product quality rather than service quality. They were shared some agreement that they do not want to wait for returning product or refunding money if product did not meet the minimum quality requirement due to poor delivery service. Interviewee1 said that, "I do prefer Brick and mortar store because I need to select and pick up item by myself especially I do not trust online shopping either product expire date and product defect".

For users who have experienced about Tops online, they were not confident in advanced order because the app did not display the number of available product. One of user planned to receive the order in next 3 days, but Tops informed on delivery day that the product was sold out.

Furthermore, interviewee9 gave some suggestion that "I never have any experience about online grocery shopping even I would try the service for time saving. Unfortunately, my friend told me her grocery order was damaged and waiting a week for new one. However, I think it could make me more convenient if I can shop on mobile and pick up my order at branch because I would satisfy to check quality of products and carry out them by myself".

About customer support service that Tops also provides various ways to support its customers such as call, email and chat, which most of respondents gave positively opinion to this service caused more comfortable.

4.3 Perceived Ease of Use

4.3.1 Control Dimension (UX & UI)

As mobile app is a widely popular tool to enhance customers' experience, which UX & UI are important sub-dimensions to measure the perceived ease of use among respondents. From interviews, the researcher was observed all respondents to shop 7 items via Tops app, and found that a group of user spent 10-15 minutes for finishing their shopping while non-users spent at least 20 minutes. They faced several problems and obstacles during shopping.

Four users did not give-up using the app because they already had experience with the app before. A female user, aged 32, said, "It is quite hard to shop at the first time that she did not know how to continue her shopping because the app did not provided back button. I tried myself to do other ways of shopping, and now I have learned to use the app's functions".

On the other hand, all of 6 non-users as newbie users responded that the app is not easy to use and they do not want to use in the future. Most of them have shopping experience for various reasons, they shown their opinion about Tops app after interviewing. Interviewee11 said, "This app is quite hard for me to search the items. I have been searching for the items by two ways. The first way is 'searching box' that I tried several times because I did not know what keywords should be used for. Since my list is strawberry and I typed 'strawberry' in search box, then it surprised me by showing yoghurt, snack, cream bath and lip balm stick instead of strawberry fruit, which I think it was not effective. The second way, I tried to search by category. My journey was too complicated that I had to select many sub-categories to meet my destination item as strawberry. To start with selecting 'shop by category', 'fresh food / ready to eat', 'fruit' and 'import fruit', respectively, which the last step I was not sure between 'local fruit' and 'import fruit', I just guessed that strawberry is imported fruit".

4.3.2 Learnability Dimension

Four out of six non-users did not have The 1 Card member, operated by CENTRAL, which affected them incomplete the registration form of Tops because Tops online member requires The 1 Card ID number as its conditions. At the observation,

most of non-users quickly gave up and rejected the app due to complicated and no one educated them about the initial of usefulness and ease of use.

For those who are users, they understood the way to shop at Tops both online and offline even m-online was not easy at first time. According to Tops online requires customer to register their personal information before adding items to shopping cart, which customer needs to visit more than a website to get the account. Interview1 said, “It is not easy at the first time because I had to take about 20 minutes to register at The 1 Card website and Tops website before using Tops app. After that I think it was easier that I never logout my account”.

As same as interview4 said, “I downloaded Tops app because of promotion, and I did not have knowledge about the app before. I was confused since the first time that I did not know how to use, how to login, and how to register, finally I was gave up. Today I prefer online shopping through website instead of the app, and I only use the app for discount coupons”.

4.4 Benefits of Online Grocery Shopping

4.4.1 Convenience

As convenience is the primary objective for online shopping, which most of respondents is clearly identify this is the factor to motivate them to go mobile for grocery shopping. One user said that Tops app is quite good for people who do not use personal computer in daily life and she can easily connect her mobile device anytime and anywhere, as she wants.

Even delivery service is the main purpose of using mobile app, but also digital coupons are needed to replace physical coupons. Every user had experience about personalized coupons that they do not need to carry physical coupons with them anymore.

Interviewee1 said, “I like personalized coupons that Tops normally send direct mail once a quarter. In past, I had to keep paper coupons in my wallet, which sometimes paper is not strong enough for 3 months keeping. Today it is more convenient that Tops offers digital coupons through mobile app that I can redeem at anytime I want”.

Barcode reader is another interesting function on Tops app that customer easily shops the merchandises, and some of users were surprised that the app is not difficult browsing the items. A 32 years old female, shared another way of searching as, “Even it is quite hard to browse thru but I always scan and shop by using barcode reader function instead of typing the item’s name”.

Moreover, interviewee1, 3, and 10 shared the same opinion that they liked the app that offers a convenient way to login by remembering a returning customer from the account registered in its system while allowing them to continue their shopping. This does not interrupt the shopping process and help them checkout faster. The apps also provide a “wish” button to create a list of favorite, which three respondents agreed that it is a good idea to make grocery shopping easier.

In contrast, some of respondents were not comfortable using Tops app. Interviewee 7 said, “Since the app required making an account before ordering and I did not have my own one. This reminded me of the first time that the banner showed the text I had to visit the website to register my personal details. I clicked the banner and it did not give me a link to the website. So, I had to leave the app, opened the browser and typed the URL webpage. Compare with the other apps that they provided me easily options in registration such as social media or Google account to connect, and I only fill the necessary information such as address and payment details before checkout”.

Some users suggested about digital coupons that they think it was not convenient to use because the discount coupons were not available immediately, and customers need to remember 13-digits coupon number to fill in promo code.

4.4.2 Time Saving

Most of respondents realized that online grocery shopping could help in time saving, but they did not concern. As Thai culture does not value time as much as Western culture, which 3 users and 5 non-users are still preferred to do grocery shopping with their family on weekends.

And the rest of respondents accepted this advantage because most of them are officer who live in traffic area and do not drive to work. They think it is not easy to carry groceries package while getting public transportation, which they have no time driving to supermarket in a rush hour. When interviewer asked them if they are likely

to use Tops app in the future or not. They said yes because the app provides convenience to make an order via mobile app at lunchtime, and they just sit and wait at their home after work.

4.5 Promotions and Extra Offers

As Tops's main objective is to do online shopping and provide delivery service, most of users were not concerned only about delivery service, but delivery fees is another concern that they need time to think if it is worthy or not.

To explore exclusive mobile shopping to its customers that Tops normally offer rewards to users such as extra The 1 Card points and personalized coupons. All users said that they downloaded the app because of the first login rewards, and the app allows them to collect The 1 Card points with every purchase that can be redeemed for discount.

A female user said, "I saw Tops mobile app on brochure and I downloaded the app because I wanted to get The 1 Card points". As same as interviewee5 said, "I have Tops app on my mobile phone. I am happy to use the app even some function is quite difficult to use. However, the discounts that come with the application is quite attractive and encourage me to retain the app".

4.6 Conclusion

In conclusion, the findings show similar major expectations in online grocery shopping, which are information quality, system quality and service quality. Among respondents' view, information quality is the most important factor that influence their technology acceptant in term of perceived usefulness. However, users who have experienced with Tops app did not have high level of system quality concern because they trust in the brand and its security system while non-users have highly concerns about stable and response time of the app. Interestingly, guarantee policy of delivery service can be the big role of customer perceived value and usefulness in term of customer satisfaction better. Even most of users have awareness about Tops guarantees such as product quality & freshness and online services, but not all of them are willing to do online shopping because

they want to test, touch and pick the products by their hands. Also, they do not want to wait for returning product or refunding money if their order did not meet the minimum quality requirement due to poor delivery service. However, all non-users never heard about the guarantees as Tops mentioned before, unlike other brands that they perceived.

This result reconfirms that perceived ease of use has an impact on customer's attitude towards Tops app. There are many barriers for respondents to complete the steps of checkout, which are registration processes, searching function and lack of user's knowledge.

Furthermore, since Tops has objective to aim in m-commerce by providing a way of more convenience to its customers, which the interviews could be clarified that most of respondents already perceived the useful of online shopping. But they also perceived some inconvenience to interrupt their purchasing process. For example, the app did not allow users to check their points balance and also the digital coupons did not link to redeem at the checkout, which users need to remember 13-digits on coupons to cut their cost.

Last but not least, it was not surprising that promotions and extra offers have a positive influence on the app usage, which most of respondents were willing to download and continue to use if Tops offer them the attractive promotions or large percentage of discounts.

CHAPTER V

RECOMMENDATIONS AND LIMITATIONS

The findings and conclusion in this research provide an insight with customers' perception regarding grocery app, especially Tops supermarket, which is the biggest supermarket chain in Thailand.

According to the Technology Acceptance Model, perceived usefulness and perceived ease of use are the primary dimensions in developing grocery apps, which in, millennial generation is the potential target on technology product adoption in long term. Thus, motivating this target group is also important to focus on for grocery retailers. From the findings, this target group is already familiar with mobile app because they frequently used it in normal life, and they still have had good experienced in shopping app so far. Therefore, with thousands of apps in the world that user was not patience to wait for app responding. They were ready to delete the app if it did not meet their expectation for several reasons such as less useful, complexity or uncomfortable to use.

Refer to the previous research, Thais' behavior is relatively high shopping enjoy and low time pressure (Shannon, 2009). As well as all respondents are Thai and normally enjoy spending quality time together with their family on weekends. They were preferred brick and mortar for exploring their shopping experience instead of shopping online that they did not trust in product and service qualities.

5.1 Recommendations

It is suggested that grocery retail's management use this finding as criteria to create a native grocery app more valuable and usefulness. When it is an era where mobile app could become to the primary source of competitive advantage in the future. This platform is a good idea to grab younger generation who easily adapt to the latest technology. From the findings, there are some helpful information that can be the recommendations for grocery retailer, especially Tops supermarket, which belongs to

Central Food Retail Company to improve and understand more about customer's perception regarding grocery app.

5.1.1 Improve Customer's Perception in Perceived Usefulness

Tops app normally provides the product information that ensures quality, as its core service is important to focus on. The respondents place great importance on the product categories display, update available quantity and product information often, and give them a greater variety of product choices in order to provide customer with the complete service of actual shopping. Moreover, the moment to create the contents that development team can start seeing the response rates, clicks through rates, and conversion rates. In response to the user actions, it could be better if developer rearranges the interesting contents or design of the app.

As such trust and reliability have to be emphasized due to its utmost importance in predicting customers' perceived value of usefulness. Lack of trust and reliability online may lead to lack of trust of the offline. To focus on maintaining the trust, grocery retailers need to understand those elements that communicate trust to the user. Since trust is based on the user's experience, the more trustworthy the relationship with the mobile service, the easier it is for Tops to use frequent updates to remind users about its app and demonstrate that it is continuing to improve and fix any unstable. Be sure to include the changes in the update description to highlight what customers can look forward to and encourage them to open the app, which is a good idea to enhance brand's credibility.

To ensure customer the most satisfaction, company should create two-way communication channels within the app to make them feel special and scale when they face any problem issue, questions, and suggestions from the app. For example, the app should provide chat feature or 24 hours call center to support the customers.

5.1.2 Provide Rich of UI and UX

Apps should rich in "user experience" (UX) and "user interface" (UI) to enhance customer's experiences that are pleasant, effective and enjoyable. Refer to the findings that most of respondents use a handful of mobile app in daily life. The design of grocery shopping apps should be friendly to users and drive purchase transactions, bring a lot of ease of use and create convenient experience for the customers.

Most of non-users were quick to reject Tops app that are initially perceived, as not meeting their needs, even when detailed “Help” section exist. Therefore, apps should be able to achieve their aims through intuitive design.

5.1.3 Create an Attractive Advertising

According to the first stage in the customer decision process refers to needs and awareness that customers start to know and aware about the app at this phase. Once Tops has its own unique brand identity, it not difficult to promote its product as Tops app via online and offline platforms such as social media likes YouTube, Facebook and Twitter where millennial generation are. The advertiser needs to launch an interesting advertising or PR to grab the most attention and build awareness among target customers in this cognitive stage. For example, video ads is interesting tool to convince potential customers to interest the app, which the contents should follow by the trends at that time.

An average consumer moves to the Internet to find answers to all his problems, everything. Leveraging it by using Search Engine Marketing (SEM) in order to grow fast and gain market share from competitors. Once the customers search for its competitors, Tops’s ads will show. With the pay-per-click model ads, Tops gets impression share from its competitors. Even if they click on the ads and land to store’s website where the mobile app ads on, the company is pretty sure that it can acquire them with strong products.

5.1.4 Provide an Advance Step of Convenience

Most of respondents shared their first-time logging in that it was difficult and complicated. Tops should take the benefit of selecting from a huge list of social networks for social sign on by providing customers with a choice of networks that they are most likely to use for sign up such as Facebook, Twitter, and Google+ are an absolute must. Moreover, the digital coupons should be easily redeeming to give customers more convenient that they do not remember all 12-digits to cut their cost.

As most of Thai people are family-oriented who prefer grocery shopping together with their family. Align to the culture while increasing enjoyment and helpful to its customer, it suggested that the app should be allowed customer to share a grocery list with their family members. The app needs to make sharing easy with other people

by requiring all members download the app and enter the same email address on the setup screen to access one joint account. Click the confirmation email and they are ready to make shared lists. Anyone can make a list or add an item at the same time.

5.1.5 Develop Omni channel Strategy

As nothing is guaranteed which method is better than another. A combination of both digital and physical worlds seems the best. Two of online and offline retailers should coexist with interchanging roles across the customer path. At the starting point, physical store plays as a major role in building awareness and engagement as a stage for customized consumer experiences. As the interaction progresses and customers interest and demand closer relationships with the brand, online grocery retailer rises in importance. Tops could use big data to analyze the great details of customer's behavior and interest, which marketing team can able to track from their previous purchased, and be able to recognize when customers are nearing a purchase decision and nudge the transaction to completion by offering preferred products and rewarding them with exclusive benefits or promotions through the app.

Most of respondents show that they are more likely to shop in brick and mortar than e-commerce via mobile app, but once they want in-store services available through their mobile devices. Supermarket firm should enhance the shopping experience of the customers by encouraging them to use the app to access product specific content such as ingredients and nutritional information through QR codes, which are placed on products in-store.

5.2 Limitations and Suggestions for Future Research

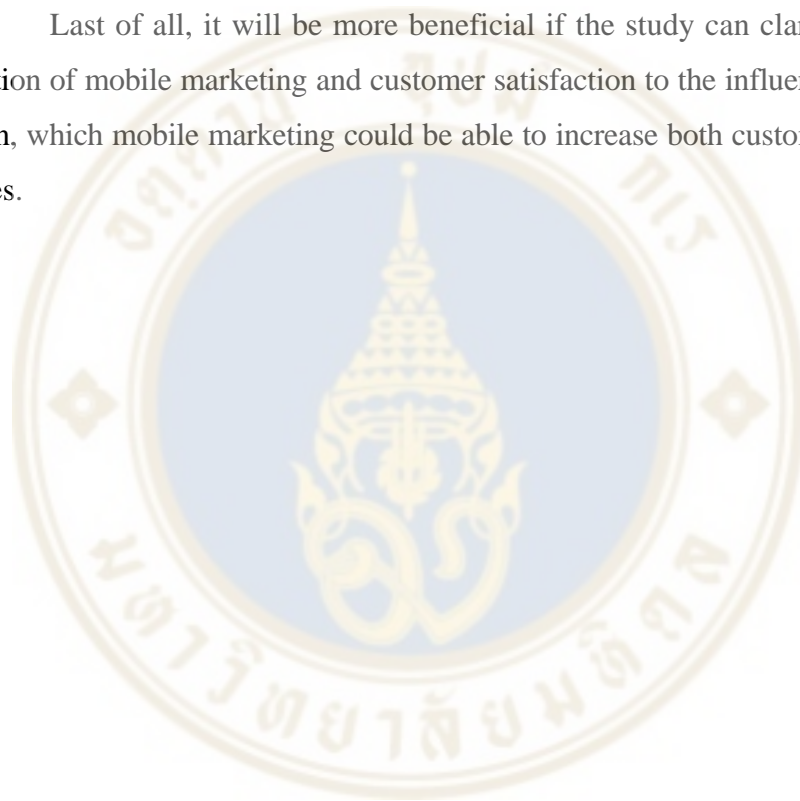
5.2.1 Limitations

Firstly, with the time constraint, the sample size is 12 people in Bangkok Metropolitan area only. The result from this group may not be able to represent the whole customer attitude towards perceived usefulness, perceived ease of use and other benefits in grocery app, especially Tops supermarket.

5.2.2 Suggestions for Future Research

This paper aimed to explore and focus with the group of millennial aged to study the factors affect customer's decision to use grocery mobile application, especially Tops supermarket. It is recommended for manager to conduct research on specific demographic profile of respondents that match with brand's target and positioning. Furthermore, the use of other qualitative methods such as focus group is recommended to explore more into customers' insight for manager to come up with new ideas for a more solid developing and marketing plan.

Last of all, it will be more beneficial if the study can clarify further from the relation of mobile marketing and customer satisfaction to the influences on purchase intention, which mobile marketing could be able to increase both customer's experience and sales.



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