KEY SUCCESS FACTORS CREATING ENGAGEMENT AMONG CUSTOMERS AND FASHION MOBILE APPLICATION

BY

MISS CHATTRAPORN PETCHDEMANEENGAM

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
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ENTITLED

KEY SUCCESS FACTORS CREATING ENGAGEMENT AMONG CUSTOMERS AND FASHION MOBILE APPLICATION

was approved as partial fulfillment of the requirements for
the degree of Master of Science Program in Marketing (International Program)

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ABSTRACT

Nowadays, technology is influencing and enhancing the daily life and smartphones are now playing an important role to connect among users or used as a medium communicating from retailers to customers. In particular, smartphone is the only effective medium that can reach customers whenever or wherever they are.

The purpose of this research was to explore consumer’s shopping habits, and behavior of fashion mobile application usage in order to discover the key factors that effectively creates engagement between users and fashion mobile application. To achieve the objectives, both exploratory and descriptive researches were conducted including secondary research, in-depth interview with seven interviewees and questionnaire with 161 respondents.

From the research, 161 respondents are divided into four segments which are statistically significance including 1) Urbanized Users: sociable and convenient-oriented people, 2) Unexpected Users: don’t care any factors comparing to other segments, 3) Value for Money Searchers: incentive-oriented and a certain level of personalization, and 4) Personalization Searcher: information seeker for better quality of life. The research found that Value for Money Searchers has the highest level of engagement including satisfaction level, intention to download, intention to spend longer time or more frequent, and intention to use it regularly while Urbanized Users have more tendency to recommend application to others.

The key findings of this study can be used to develop the marketing strategies as well as develop new application features that the target customers really perceived as importance for new fashion mobile application.

Keywords: Fashion mobile application engagement, fashion mobile application, engagement, fashion

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Miss Chattraporn Petchdemaneengam

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CHAPTER 1
INTRODUCTION

1.1 Introduction to the study

Nowadays, the world become smaller and smaller by the Internet and technologies. In this digital era, smartphones are now playing an important role to connect among users or used as a medium communicating from retailers to customers. In particular, smartphone is the only effective medium that can reach customers whenever or wherever they are. Regarding to Euromonitor (2015), smartphones sales in Thailand increased by 11% and reached 11.8 million units in 2015 and continue to be popular across all generations due to cheaper price and 4G LTE coverage in rural areas. Thus, smartphone is becoming a very powerful device in this age.

Although there is a rapid growth of online stores or e-commerce in recent years, offline retailers still dominate the market in terms of sales value. Online shop is only the starting point of retailer because it is easy and low risk. However, at the end of the day, online shop still needs to be exist in physical world or bricks-and-mortar in order to create engagement and experience to the value customers. Shoppers still need to see or touch the product materials, try on whether it matches them, and especially for Thai people, shopping is a kind of leisure activity.

Moreover, this study is focusing on fashion industry because the sales value for apparels and footwear is approximately 283 billion in 2015 with 6% 2010-2015 CAGR (Euromonitor 2016). Also, there comes an omnichannel trend that bridging the gap of physical retailers and online customers recently. Fashion mobile application will be a major part of this trend that helps connecting offline and online world leading to the engagement among customers, fashion retailers and mobile application.

1.2 Objectives

In order to achieve the main purpose of this study, the research objectives are listed as follows:

1) To study the capabilities, opportunities, limitations, and trends of fashion mobile application
2) To explore consumer behavior toward shopping habits
    a. To explore the types of shopping habits based on different objectives
    b. To investigate shopping habits in terms of occasion, frequency, timing
    c. To discover consumer behavior in terms of purchasing criteria
3) To explore how consumer gets engaged during each stage of customer journey
4) To explore how consumer gets engaged during each stage of decision making process
5) To explore opportunities for mobile application to engage with consumers
6) To generate consumer profiles based on the usage of fashion mobile application
7) To generate consumer profiles based on shopping habits
8) To measure the key factors creating engagement in fashion mobile application

CHAPTER 2
REVIEW OF LITERATURE

2.1 Review of Shopping Applications are the Fastest Growing in Mobile.

According to Flurry, Yahoo-owned mobile analytics firm, mobile app usage has been growing significantly by 76% in 2014. Shopping, Utilities & Productivity, and Messaging are the highest top three application categories that contribute considerably to the overall increase in application usages in the US. In particular, shopping category had the largest growth at 174% for overall mobile platform, while on Android only, the growth was up to 220%. "This was the year retail came to mobile in a big way", said Flurry. For the "app usage" definition, not only a user opens an app, but also records a session as well, meaning that they actually engaged with the app for some period of time and getting more comfortable shopping on the mobile platform. Regarding the user behavior, time spent jumps during commute time at 9AM and lunchtime and reaches its peak during prime time at 8PM. Thus, shopping application becomes a leisure activity relaxing them after a long day working. (Perez, 2015)

2.2 Review of Customer Engagement: Best of the Best

Engagement is everything. In many cases, "there is a big gap between what customers expect the experience to be and what it is", said David Raab, principal, Raab Associates. Nowadays, customers are not the same as they used to be due to the integration of web, physical commerce, and socialization that makes them always connected. Rather than the traditional marketing approach, real-time personalized experience becomes more and more important to create significantly relevant conversation across channels. Particularly, relevancy, convenience, responsiveness, and reliability are the most influential characteristics of customer engagement in order to meet and exceed customer expectations.

Thanks to digital era, various channels such as social media, websites, in-store devices, location-based application can leave digital imprints containing rich of data. Marketers can analyze them to generate more personalized and localized interactions that leads to higher satisfaction level and new revenue. The value of personalization is increasing toward consumer perception. More consumers are willing to tradeoff their privacy for convenience and other valued engagements. Up to 58% of respondents would share personal information for more personal services. Thus, there is an opportunity for company to analyze the big data of consumer information i.e. demographic, psychographic, behavior, and lifestyle in order to conclude and predict the consumer preferences. Emotional bonding is key and personalization is one way that brand can engage customers emotionally.

To illustrate with Montreal's public transportation system (STM), it offers not only the efficient ride, but also convenience, personalized deals, and fun. The integration of geolocation, data analytics, mobile application, and gamification enables company to offer contextually relevant promotions on the passengers' routes resulting in the increase in the ridership. Another example is Lenovo. Everyone uses social media to broadcast their messages, but Lenovo does the difference by using it as a media to listen to what consumers says. As a result, the company get the insightful information leading to better customer engagement. (Forbes INSIGHTS, 2015)

2.3 Review of Easy and Effective Customer Engagement Strategies

Customer engagement is a journey, not a destination because it does not stop. Most brands focus on customer acquisition while they forgot to retain them along the journey and resulting in switching to competitors. The following strategies are the most interesting strategies related to the research topic.

1) Use social media as an engagement tools. Brand can share, connect, and get feedback from value customers leading to customer satisfaction and retention.
2) Custom content can address a customer issue. Regarding Demand Centric, "78% of CMOs think custom content is the future of marketing. And 61% of buying decisions are influenced by custom content"

3) Produce interactive content in order to meet customer demand. Since interactive content is an effective method for educating customers and customers will become engaged and willing to take actions.
4) Create mobile apps. Mobile apps can drive growth easily and the combination of data analytics and psychology can differentiate mobile application from other platforms, offer fresh content and finally create bonding with customers. (Buildfire, 2016)

2.4 Review of Leveraging Apps to Increase Customer Lifetime Value

While the number of mobile application is increasing, simply having an application is not enough to capture customer attention. In order to see a strong ROI on application investment, the application has to be outstanding and can retain customer to use it and remain profitable.

The reason why focuses on application is that almost 90% of time spent on mobile devices is spent using applications. Also, there is a considerable growth of time spent on shopping application at 174% year-over-year as of the end of 2014.

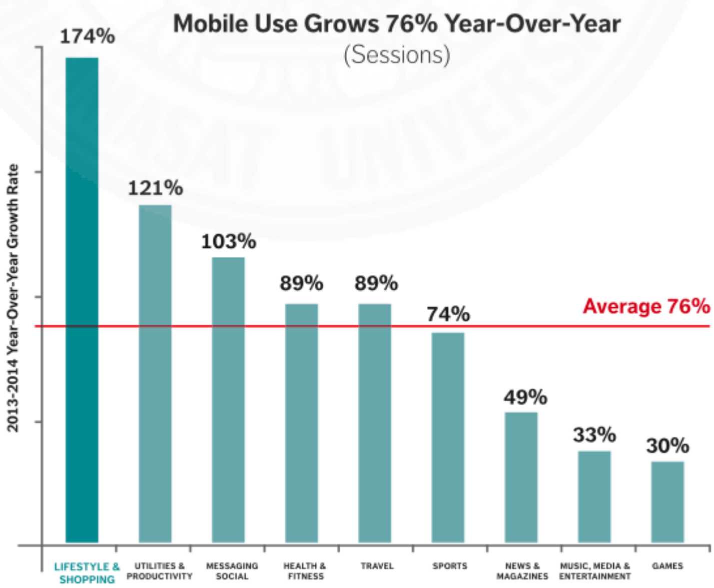

Figure 2.1 Growth rate of mobile usage

As the increasing number of application leads to the increase in customer lifetime value (CLV), how to grow CLV is one of the most important criteria to optimize the application experience. The factors affecting CLV on applications are 1) Customer Retention and Engagement 2) Customer Acquisition Cost and 3) Purchase Value and/or Frequency. Thus, the tactics that can optimize the aforementioned factors are as follows:

1) Personalization – The balance of personalization is a key. The lack of personalization will lead to customer satisfactory and not engage to the application, while overwhelming personalization leads to the privacy concerns.
2) Value-added content – The loss of interest is the top reason off app abandonment. Almost 25% of users who abandoned the app could re-engage by offering exclusive or bonus content available on the application only. Together with personalization, smart recommendations could generate the value-added content and thinking more than just sales. For example, fashion mobile application can allow customers to upload the outfits of celebrity and return them with the matching product in your own inventory to create similar look.
3) Referrals – More than 33% of app users downloaded the app due to personal recommendation. Referrals can be applied in many cases such as sharing app and products to friends and family, offering discount to friends via social sharing, etc. (Mobify, 2015)

2.5 Review of Touchpoints and Fashion Retail

In this age, customer no longer belongs to the reseller or the store, but belongs to the brand. Brand needs to enhance customer experience in every touchpoint to meet and exceed their expectation while every touchpoint is risky either to lose the customer or win the situation that create loyalty and word of mouth. The key touchpoints are as follows: brand website, social network, external visual, entrance, product on sale, price and promotion, internal visual, sale assistant, actual environment, fitting room, register desk, and e-commerce, and each macro-touchpoint has different expectation, weakness and opportunity

Hence, the ultimate goal is to work on touchpoint mapping and experience of customers that can enhance customer satisfaction to get them return to your brand, and create word of mouth. (Italian Customer Intelligence, 2015)

2.6 Review of 90 Percent of Retail Shoppers Use Smartphones in Stores

The overwhelming majority, up to 90 percent, use smartphones while shopping. The major activities on smartphones while in-store are 1) price comparison, accounted for 54% 2) searching for product information, accounted for 48% and 3) looking for online reviews, accounted for 42%. Another one of interesting behavior is deal-seeking in-store. Hence, there are two significant marketing opportunities as follows:

1) Opportunity of deals offering when people get nearby the stores. Up to 57% would be more likely to shop.
2) Loyalty program. Even more, if it is available, up to 76% would be more likely to shop.

These two opportunities, deals and loyalty programs, are the main reasons to get customer downloads and turn on push notifications. To leverage mobile shopping habits, retailers must see in-store smartphone usage as additional to the traditional retail experience. (Sterling, 2015)

2.7 Review of Mobile Phone in Thailand

Regarding Euromonitor International, there are two types of mobile phones including feature phones and smartphones accounted for 3.5 and 11.8 million units respectively. In 2015, the volume sales of smartphones rose by 11% while feature phones continually lost sales to smartphones making the volume sales dropped significantly by 20%. Not only friendly touch screens and wide range of functions that made smartphones become popular across all generations, but expanded coverage of 4G LTE to rural areas also contributed to the growth in smartphones. For the operating systems, though Apple’s iOS, or iPhone, is very popular in Thailand, it is not affordable by low-income population due to its high price. Thus, Android OS are the major player in Thailand accounted for 75% while Apple's iOS and Windows OS accounted for only 19%, and 6% respectively. (Euromonitor International, 2015)

2.8 Review of Retailing in Thailand

Digital advances influence retailing in Thailand considerably due to its convenience and online shopping becomes more significant in value sales term. Many store retailers have shifted towards a multi-channel strategy and integrate both offline and online channel to enhance advertising and promotional activities. Though non-store retailing has a substantial value growth at 12.6% while store-based retailing growth was at 4.8% in 2015, store-based retailing still dominates in terms of value sales at 2.8 billion THB and accounted for 95% of total retail sales since customers can select, try, and mix and match the product with themselves. Moreover, in terms of fashion products, apparel and footwear specialist retailers accounted for 56.7 billion THB of the sales value, 4,000 outlets, 6% value growth in 2015, and 30.8% value growth in 5-year period. (Euromonitor International, 2016)

Conclusion of Literature Review

As the number of mobile phone in Thailand is increasing significantly and store-based retailing still dominates the market in terms of sales value and volume, fashion is one of the most potential industry of retailing in Thailand and is selected to study in this research to enhance the customer engagement. Regarding Sterling 2015, 90 Percent of Retail Shoppers Use Smartphones in Stores, there are plenty of opportunities that retail can engage with the customers to enhance the service level and increase customer lifetime value such as personalized offers, value-added content, referrals, and loyalty program. Eventually, mobile application can play an important role to help creating customer engagement which is best of the best in retail industry leading to the increase in sales and profit accordingly.

On the other hand, this research will contribute to the literature by studying consumer behavior toward shopping habits in Thailand, especially in the capital city i.e. Bangkok, and providing the opportunities for mobile application to engage with customers that can enhance the service level of retail stores in Thailand.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research Design

In order to achieve the aforementioned objectives, marketing research is the most effective tools to collect data. This research focuses on both qualitative and quantitative analysis by starting from exploratory research including secondary research from various sources and in-depth interview, then followed by descriptive research gathering data by online questionnaire. After the process of data collection, the analysis will be done in order to identify the key success factors and recommend the key features that fashion mobile application should be developed.

3.2 Exploratory Research Methodology

The purpose of exploratory research is to analyze current situation of fashion industry and mobile application in Thailand. Various aspects will be investigated to have better understanding in particular industries and to further develop questionnaire afterwards. Exploratory research consists of two research methods as follows:

3.2.1 Secondary research

The purpose of secondary research is to study the capabilities, opportunities, limitations, and trends of fashion mobile application (Objective 1). The secondary data was obtained from many credible sources including published sources, websites, academic journals, and fashion blogger article. On the one hand, in order to have better understanding of Thai fashion industry related to mobile application, the sources mainly focused on Thai consumer behavior based on local sources such as SistaCafe, Pantip, ShobShop, etc. On the other hand, in order to seek for more opportunities to adapt and apply with Thai consumers, the data was obtained from international sources around the world such as Euromonitor, TechCrunch, Forbes, TheGuardian, Mashable, and other fashion mobile application such as Zara, H&M, Shoppr.

3.2.2 In-depth interview

In-depth interview was conducted to discover insights of consumer behaviors, especially for the shopping habits. The in-depth interview was piloted with three respondents, and followed by seven respondents to obtain insightful information. This method was performed according to the following objectives:

- To explore consumer behavior toward shopping habits (Objective 2)
    - To explore the types of shopping habits based on different objectives
    - To investigate shopping habits in terms of occasion, frequency, timing
    - To discover consumer behavior in terms of purchasing criteria
- To explore how consumer gets engaged during each stage of customer journey (Objective 3)
- To explore how consumer gets engaged during each stage of decision making process (Objective 4)
- To explore opportunities for mobile application to engage with consumers (Objective 5)

3.3 Descriptive Research Methodology

After completing exploratory research, the descriptive research was conducted with 161 online questionnaires and the length of questionnaires did not exceed 20 minutes. The objectives of descriptive research are as follows:

- To generate consumer profiles based on demographics (Objective 6)
- To generate consumer profiles based on shopping habits (Objective 7)
- To measure the key factors creating engagement in fashion mobile application (Objective 8)

To comply with the listed objectives, questionnaire design was divided into 6 sections for different purposes as follows:

- Section A: Screening questions
- Section B: Shopping behavior questions
- Section C: Behavior of using mobile application questions

- Section D: Customer perceived value toward fashion mobile application engagement
- Section E: Level of engagement questions
- Section F: Demographic

3.4 Identification of key research variables

3.4.1 Independent variables of the study

- Section B: Shopping behavior questions
- Section C: Behavior of using mobile application questions
- Section D: Customer perceived value toward fashion mobile application engagement
- Section F: Demographics

3.4.2 Dependent variables of the study

- Section E: Level of engagement questions i.e. satisfaction level, intention to download, intention to use more frequent, intention to regularly use, intention to recommend to others.

3.5 Sampling procedure

Due to time constraint, the non-probability (convenience) samples was used for both in-depth interview and questionnaires in order to obtain information rapidly. The data collection process was 21 days during 5-25 March 2017 and conducted in Bangkok and metropolitan area. Research methodologies and sample size in each method was illustrated below:

Table 3.1 Research methodologies and sample size

Type of research	Method	Sample Size	
		Pilot Test	Actual
1. Qualitative	In-depth interview	3 respondents	7 respondents
2. Quantitative	Survey questionnaire	5 respondents	161 respondents

For the sample selection, the target population was as follows:

- Area: Bangkok and metropolitan area
- Socio-economic status (SES): A, B
- Age: 18-40 years
- Gender: Male and Female
- Behavior:
    - Regularly use smartphones and mobile application, at least 2 hours per day
    - Regularly go shopping for fashion items, at least 1 time per quarter

3.6 Recruiting Plan

For in-depth interview, the respondents were recruited through personal connections, and the interview was conducted under the conditions below.

- In-depth interview was conducted with 10 respondents.
- Each interview took approximately 20 minutes.
- The approach of telephone interview was conducted.

The online questionnaires were distributed through personal contact in chatting application such as LINE, and Facebook Messenger, and some other related website or community such as pantip.com during 5-25 March 2017.

3.7 Limitation

Due to the time constraint, researcher had a total time of five months for designing research methodology, gathering data from both primary and secondary sources, analyzing the data and summarizing data in the appropriate format. Thus, this research may represent only the overview of fashion mobile application for Thailand, or particularly in Bangkok area.

Moreover, the research cannot represent the entire population due to

1) The study uses non-probability sampling method or convenience sampling.
2) Time and budget constraints.

3.8 Data Analysis Plan

Data insights was obtained from exploratory research by seven in-depth interviews followed by descriptive research that was analyzed through 161 completed questionnaires. Before analyzing, the questionnaire surveys were screened for some errors and edited as necessary to ensure more accurate data; then, coded. Only the analysis of quantitative data was using the computer tabulations analyzed by the Statistical Package for the Social Sciences (SPSS) for analysis of variance, focusing on frequencies, cross tabulation, associations between variables, and other statistical analysis as appropriate.

CHAPTER 4
RESULTS AND DISCUSSION

4.1 Key findings from Exploratory Research

The exploratory research was conducted with seven respondents that provide an insightful information as follows:

Table 4.1 Respondent profiles for Depth Interview

ID	Name-Surname	Age	Gender	Occupation	Shopping channel
1	Erawadee Soonthararak	26	Female	Sales engineer	Offline
2	Kingsai Suwannik	36	Female	Student	Offline/Online
3	Tippawan Kornanansiri	28	Female	Marketing Officer	Offline
4	Apichaya Ketrattanabovorn	28	Female	Financial Analyst	Offline
5	Suprawee Kongsom	27	Female	Instructor	Offline
6	Suthaporn Teeraprasert	26	Female	Strategic Planner	Offline/Online
7	Kotchamon Ngamkijpinyo	28	Female	Business Owner	Offline/Online

<u>Shopping channel</u>

Although some online marketplace offers cheaper price, majority of respondents goes shopping offline because

- *"I want to touch and feel the product quality.",* Kingsai.
- *"My body shape is not standard, I am worried that the product will not fit. Therefore, I want to try on cloths before purchase.",* Tippawan.
- *"I will purchase online only if the size is standard or I have purchased that*

shop", Suthaporn.

- *"I had a bad experience with online shopping that the actual product doesn't look like the picture shown in the website."*, Apichaya.

<u>Influential factors for walking into the stores.</u>

The main reasons why shoppers walk in to the store are because of the product and promotion. However, incentives can stimulate them to visit store easier. For example, coupon, points that can redeem for rewards such as beauty voucher, food and beverages voucher, lifestyle voucher, or cash discount.

- *"I will immediately walk into the stores if there is a big sales promotion",* Suprawee
- *"When I walk around, I walk into the shop because the product matches my styles",* Kotchamon.

<u>Stimulating factors that leads to the engagement of mobile application</u>

Shoppers are willing to open application more when they get incentives, special promotions, and personalized deals that match their interests. Additionally, Interaction with friend in application will increase the engagement level in fashion application such as referring product to a friend, give a suggestion, or community.

- *"It would be good if mobile application knows my preferences and offers me special personalized deals",* Erawadee.
- *"Some credit card offers me more points when I purchase at a particular shop, it would be good that fashion mobile application provides me information of my favorite brand"*, Kingsai.
- *"Sometimes, I need to find some particular product urgently but I don't know where to find. I want to search in the mobile application and it can navigate me the closest one.",* Apichaya.
- *"I downloaded UBER application because of my friend's recommendation and her referral code.",* Suthaporn.
- *"My friend suggested me to use shoppee because it offers a big discount and incentive"*. Kotchamon.

4.2 Key findings from Descriptive Research

4.2.1 Summary of respondents' demographic profile

After data collection process, data was analyzed using Statistic Package for Social Sciences (SPSS). From 161 respondents, the majority of gender, age, highest education degree, occupation, and salary are 78.3% female, 87% aging between 23 to 30 years old, 67.7% master's degree, 56.5% corporate employee, and 47.2% salary ranging between 30,001 to 50,000 baht per month respectively.

Table 4.2 Respondents' Demographic Profile

Respondents' demographic profile		Count	Column N %
F1) Gender	Male	35	21.7%
	Female	126	**78.3%**
F2) Age	16-22 years	4	2.5%
	23-30 years	140	**87.0%**
	31-40 years	14	8.7%
	41-50 years	3	1.9%
F3) Highest education degree	High school graduate	3	1.9%
	Associate's degree	2	1.2%
	Bachelor's degree	47	29.2%
	Master's degree	109	**67.7%**
F4) Occupation	Student	24	14.9%
	Corporate employee	91	**56.5%**
	Government officer / State enterprise officer	16	9.9%
	Self-employed / Freelance	9	5.6%
	Business owner	15	9.3%
	Unemployed	5	3.1%
	Others	1	0.6%
F5) Salary	15,000 baht or less	11	6.8%
	15,001 - 20,000 baht	15	9.3%

Respondents' demographic profile		Count	Column N %
	20,001 - 25,000 baht	24	14.9%
	30,001 - 40,000 baht	38	**23.6%**
	40,001 - 50,000 baht	38	**23.6%**
	50,001 - 70,000 baht	16	9.9%
	70,001 - 100,000 baht	15	9.3%
	100,001 baht or more	4	2.5%

4.2.2 Factor analysis on the important factors toward fashion application engagement

Factor analysis was conducted for the important factors toward fashion mobile application (question D1 to D23) with Varimax rotation and showed that 23 statements can be grouped into five factors based on Eigenvalues greater than one and accounted for 68.3% for total variance. All five factors were labelled as 1) Socialization 2) Price-sensitive 3) Personalization 4) Data consuming and 5) Convenience as follows:

Table 4.3 Result of Factor Analysis on the important factors toward fashion application engagement

	Factor 1 Socialization	Factor 2 Price-sensitive	Factor 3 Personal-ization	Factor 4 Data consuming	Factor 5 Convenience
D19) Shopper community: recommend product/content to your friends	**0.791**			0.354	
D22) Influencers/bloggers/celebrities use the application	**0.743**				
D20) Social status: compete among users, level of users	**0.743**				
D18) Shopper community: interact with other shoppers	**0.738**			0.425	
D21) Fun activities / Gamification	**0.616**	0.39			

	Factor 1 Socialization	Factor 2 Price-sensitive	Factor 3 Personal-ization	Factor 4 Data consuming	Factor 5 Convenience
D23) Friends and acquaintances use the application	**0.608**	0.302			0.397
D16) Incentive for repurchasing products		**0.892**			
D15) Incentive for purchasing products		**0.878**			
D14) Incentive for visiting stores i.e. point collection	0.337	**0.762**			
D6) Nearby store locator			**0.707**		0.395
D7) Product recommendation	0.345		**0.681**		0.33
D11) Provide nearby shops' promotion		0.381	**0.629**		
D9) Enhance instore experience: sales service		0.372	**0.562**	0.303	
D12) In-app exclusive promotion		0.5	**0.522**	0.513	
D5) Updated fashion trends or contents			**0.504**		0.441
D13) Personalized promotion		0.4	**0.433**	0.425	
D10) Enhance instore experience: convenient payment system			**0.457**	0.531	
D2) Variety of styles				**0.718**	0.33
D1) Variety of shops				**0.668**	0.344
D17) Customer review		0.311		**0.655**	
D4) Well-designed UX/UI					**0.706**
D3) Ease of use				0.504	**0.626**
D8) Enhance instore experience: scan barcode to see product details			0.376	0.328	**0.4**

4.2.3 Segmentation

The cluster analysis was conducted to segment target consumers based on 5 factors toward fashion application engagement of. Total of 161 respondents is divided by Two-Step Cluster method using Schwarz's Bayesian Criterion (BIC) into 4 clusters

Table 4.4 Result of Two-step Cluster analysis

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Socialization	**0.64986**	-0.47974	-1.13822	-0.3841
Price sensitive	0.17382	-0.42918	**1.24566**	-1.02094
Personalization	0.04421	-1.22998	**0.49373**	**1.05633**
Data consuming	0.05906	-0.1901	-0.3516	**0.36664**
Convenience	**0.23584**	-0.45637	0.05719	-0.16819

Figure 4.1 Result of Two-step cluster analysis

Segment 1: Urbanized users (n=79, 49% of total respondents)

This group of people are sociable and convenient-oriented people. They care social status to compete with friends, want to interact with other shoppers, have fun activities or gamification, and influenced by friends, acquaintances, influencers, bloggers, and celebrities. Moreover, they prefer convenient life and rated well-designed application and easy to use relatively high.

Segment 2: Unexpected users (n=34, 21.1% of total respondents)

This group doesn't care about socialization, price-sensitiveness, personalization, data consumption, and convenience at all comparing to other groups. In particular, personalization was paid attention the least.

Segment 3: Value for money searcher (n=22, 13.7% of total respondents)

This group is an incentive-oriented, and prefer a certain level of personalization. They can be attracted by giving incentives such as incentive for visiting stores, purchasing products, or repurchasing products.

Segment 4: Personalization searcher (n=26, 16.1% of total respondents)

This group loves all sorts of personalization i.e. personalized promotion, in-app exclusive promotion, providing nearby information including stores and promotions, and want to have a better in-store experience including sales service and convenient payment system. Moreover, they search for many kinds of information i.e. shops, styles, and customer review. Thus, they are information seeker for a better quality of life.

To compare mean between groups of these four segments, ANOVA was conducted and found that four out of five factors including socialization, price sensitiveness, personalization, and convenience were significantly different between groups at 95% confidence level (p-value < 0.05)

Table 4.5 Mean comparison for four segments and five factors using ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Socialization	Between Groups	73.526	3	24.509	44.497	**0.000**
	Within Groups	86.474	157	0.551		
	Total	160	160			
Price sensitiveness	Between Groups	69.887	3	23.296	40.587	**0.000**
	Within Groups	90.113	157	0.574		
	Total	160	160			

		Sum of Squares	df	Mean Square	F	Sig.
Personaliza-tion	Between Groups	85.966	3	28.655	60.768	**0.000**
	Within Groups	74.034	157	0.472		
	Total	160	160			
Data consuming	Between Groups	7.719	3	2.573	2.653	**0.050**
	Within Groups	152.281	157	0.97		
	Total	160	160			
Convenience	Between Groups	12.283	3	4.094	4.352	**0.006**
	Within Groups	147.717	157	0.941		
	Total	160	160			

4.2.4 Segmentation Profile

4.2.4.1 Demographic

As the target respondents were screened before the questionnaire began and recruited by convenient sampling method, the majority of all segments are quite the same demographics that were female working as a corporate employee.

1. **Urbanized user:** 91.1% of this group ages between 23-30 years. Highest graduation level was Master's degree at 70.9% followed by Bachelor's degree at 25.3%. Up to 30.4% and 20.3% of them has salary at 40,001-50,000 baht per month and 30,001-40,000 baht per month respectively.
2. **Unexpected user:** 88.2% of this group ages between 23-30 years. Highest graduation level was Master's degree at 61.8% and followed by Bachelor's degree at 32.4%. This group has 17.6% of income level at 50,001-70,000 which is quite higher than the urbanized users and 20.6% has salary at 40,001-50,001 baht per month.

3. **Value for money searcher:** This group has older age than previous groups which is 72.7% and 22.7% at 23-30 years and 31-40 years respectively. Highest graduation level was Master's degree at 81.8%. This group has two significantly difference of income level at 30,001-40,000 and 70,001-100,000 baht per month accounted for 31.8% for both level.
4. **Convenient searcher:** This group has quite higher proportion of male at 38.5% while female was only 61.5% aging between 23-30 at 72.7% and 31-40% at 15.4%. Highest graduation level was dominated by Master's degree at 53.8% and Bachelor's degree at 46.2%. They earn salary of 30,001-40,000 baht at 42.3% and 40,001-50,000 baht at 15.4%.

Table 4.6 Demographic profile of four segments

		1. Urbanized user		**2. Unexpected user**		**3. Value for money searcher**		**4. Convenient searcher**	
		n	%	n	%	n	%	n	%
F1) Gender	Male	15	19.00%	7	20.60%	3	13.60%	10	38.50%
	Female	64	**81.00%**	27	**79.40%**	19	**86.40%**	16	**61.50%**
F2) Age	15 years or less	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	16-22 years	1	1.30%	3	8.80%	0	0.00%	0	0.00%
	23-30 years	72	**91.10%**	30	**88.20%**	16	**72.70%**	22	**84.60%**
	31-40 years	4	5.10%	1	2.90%	5	22.70%	4	15.40%
	41-50 years	2	2.50%	0	0.00%	1	4.50%	0	0.00%
	51 years or more	0	0.00%	0	0.00%	0	0.00%	0	0.00%
F3) Highest education degree	Less than high school	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	High school graduate	1	1.30%	2	5.90%	0	0.00%	0	0.00%
	Associate's degree	2	2.50%	0	0.00%	0	0.00%	0	0.00%
	Bachelor's degree	20	25.30%	11	32.40%	4	18.20%	12	**46.20%**
	Master's degree	56	**70.90%**	21	**61.80%**	18	**81.80%**	14	**53.80%**
	Doctorate's degree and over	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	Others	0	0.00%	0	0.00%	0	0.00%	0	0.00%

		1. Urbanized user		2. Unexpected user		3. Value for money searcher		4. Convenient searcher	
F4) Occupation	Student	10	12.70%	9	26.50%	2	9.10%	3	11.50%
	Corporate employee	46	**58.20%**	16	**47.10%**	14	**63.60%**	15	**57.70%**
	Government officer / State enterprise officer	8	10.10%	1	2.90%	3	13.60%	4	15.40%
	Self-employed / Freelance	5	6.30%	2	5.90%	1	4.50%	1	3.80%
	Business owner	7	8.90%	5	14.70%	2	9.10%	1	3.80%
	Unemployed	3	3.80%	1	2.90%	0	0.00%	1	3.80%
	Others	0	0.00%	0	0.00%	0	0.00%	1	3.80%

4.2.4.2 Income level and purchasing behavior

The average income level for all four groups is THB 40,745 per month. Among four groups, Value for Money Searcher has the highest average income at THB 53,977 per month followed by Personalization Searcher, Unexpected Users, and Urbanized users at THB 43,750, THB 40,661, THB 36,107 per month respectively.

The average budget per shopping trip for all four groups is THB 2,228. Among four groups, Unexpected User has the highest budget at THB 2,691 and followed by Value for Money Searcher, Urbanized User, and Personalization Searcher at THB 2,340, THB 2,066, THB 2019 respectively. Interestingly, up to 40.9% of Value for Money Searcher has the average budget at THB 1,501-2,000 per shopping trip while other groups are more distributed.

Table 4.7 Income level and purchasing behavior of four segments

Income level and purchasing behavior	Urbanized User (n=79)	Unexpected User (n=34)	Value for Money Searcher (n=22)	Personalization Searcher (n=26)	Chi-Square	P-value
F5) Salary						
15,000 baht or less	7.60%	11.80%	4.50%	0.00%	38.169	0.012
15,001 - 20,000 baht	10.10%	11.80%	0.00%	11.50%		

Income level and purchasing behavior	Urbanized User (n=79)	Unexpected User (n=34)	Value for Money Searcher (n=22)	Personalization Searcher (n=26)	Chi-Square	P-value
20,001 - 25,000 baht	19.00%	14.70%	9.10%	7.70%		
25,001 - 30,000 baht	0.00%	0.00%	0.00%	0.00%		
30,001 - 40,000 baht	**20.30%**	11.80%	**31.80%**	**42.30%**		
40,001 - 50,000 baht	**30.40%**	**20.60%**	13.60%	**15.40%**		
50,001 - 70,000 baht	8.90%	**17.60%**	4.50%	7.70%		
70,001 - 100,000 baht	2.50%	8.80%	**31.80%**	11.50%		
100,001 baht or more	1.30%	2.90%	4.50%	3.80%		
B13) What is your average budget per shopping trip? (SA)						
Less than 500 baht	0.00%	0.00%	0.00%	0.00%		
501 - 1,001 baht	**22.80%**	14.70%	4.50%	**26.90%**	28.128	.137[a,c]
1,001 - 1,500 baht	16.50%	5.90%	13.60%	**23.10%**		
1,501 - 2,000 baht	19.00%	11.80%	**40.90%**	15.40%		
2,001 - 2,500 baht	16.50%	20.60%	4.50%	7.70%		
2,501 - 3,000 baht	10.10%	17.60%	18.20%	11.50%		
3,001 - 5,000 baht	12.70%	**23.50%**	13.60%	7.70%		
5,001 - 7,000 baht	0.00%	2.90%	4.50%	7.70%		
7,001 baht or more	2.50%	2.90%	0.00%	0.00%		

4.2.4.3 Shopping behavior

The majority of all respondents, 83.85%, set purpose for each shopping trip while almost of Personalization Searcher does at 96.2%. For the purpose of shopping trip, 88.5% of Personalization Searcher goes shopping because they need to seek for specific items for particular occasions, 81.8% of Value Money Searcher goes window shopping, and 86.4% of them don’t go shopping as an activity with friends.

Surprisingly, brand types are significantly different among 4 groups at 0.004. Up to 55.9% of Unexpected User shops an International brand. 50% and 40.9% of Value for Money shops for local brand/house brand and international brand respectively which is 90.9% of them shops for branded products.

Table 4.8 General shopping behavior of four segments

		Urbanized User (n=79)	Unexpected User (n=34)	Value for Money Searcher (n=22)	Personalization Searcher (n=26)
B2) Do you always set purpose for each shopping trip? (SA)	Yes	81.00%	85.30%	77.30%	**96.20%**
	No	19.00%	14.70%	22.70%	3.80%
B3_1) Seeking for specific items for particular occasion	Yes	73.40%	58.80%	81.80%	**88.50%**
	No	26.60%	41.20%	18.20%	11.50%
B3_2) Window shopping	Yes	75.90%	79.40%	**81.80%**	61.50%
	No	24.10%	20.60%	18.20%	38.50%
B3_3) Relaxation	Yes	53.20%	52.90%	59.10%	46.20%
	No	46.80%	47.10%	40.90%	53.80%
B3_4) Activity with friends	Yes	20.30%	29.40%	13.60%	30.80%
	No	79.70%	70.60%	**86.40%**	69.20%
B6) What kind of brands do you regularly purchase? (SA)	No brand	**45.60%**	29.40%	9.10%	38.50%
	Local brand / House brand	24.10%	14.70%	**50.00%**	15.40%
	International brand	30.40%	**55.90%**	**40.90%**	**46.20%**

For shopping frequency, 44.1% of Unexpected User and 39.2% of Urbanized User regularly go shopping 1-2 times per month while 31.8% of Value for Money and 30.80% of Personalization Searcher goes more frequent at 3-4 times per month.

Normally, the consumption level of shopping is related to the number of window shopping shops that people just walking around and browsing for a certain product but not purchase yet, then the number of shop that people actually purchase the products, then the number of items that they actually buy per shopping trip. From the research, all segments mostly purchase 1-3 items per shopping trip but different amount of visited shops as follows:

- **The Urbanized Users:** majority of the Urbanized Users go window shopping at 6-10 shops, and two-third of them purchase at 1-2 shops and one-third of them purchased at 3-5 shops.
- **The Unexpected Users:** majority of them go window shopping at 1-5 shops, and purchase at 1-2 shops.
- **The Value for Money Searcher:** majority of them go window shopping at 1-5 shops, and up to 90.9% purchase at 1-2 shops

- **The Personalization Searcher:** majority of them go window shopping at 1-5 shops, and purchase at 1-2 shops

Table 4.9 Consumption level of shopping behavior

		Urbanized User (n=79)	Unexpected User (n=34)	Value for Money Searcher (n=22)	Personalization Searcher (n=26)
A2) How often do you go shopping? (SA)	Less than 1 time per 6 months	3.80%	11.80%	13.60%	11.50%
	Less than 1 time per quarter	0.00%	0.00%	0.00%	0.00%
	1-2 times per quarter	15.20%	5.90%	9.10%	23.10%
	1-2 times per month	**39.20%**	**44.10%**	22.70%	34.60%
	3-4 times per month	19.00%	20.60%	**31.80%**	**30.80%**
	5-6 times per month	5.10%	5.90%	13.60%	0.00%
	More than 6 times per month	17.70%	11.80%	9.10%	0.00%
B10) How many shops do you go window shopping, but not buy, per shopping trip? (SA)	1-5 shops	36.70%	44.10%	**54.50%**	42.30%
	6-10 shops	**41.80%**	35.30%	31.80%	30.80%
	11-15 shops	10.10%	8.80%	4.50%	7.70%
	16-20 shops	3.80%	2.90%	0.00%	0.00%
	More than 20 shops	7.60%	8.80%	9.10%	19.20%
B11) How many shops do you regularly purchase per shopping trip? (SA)	1-2 shops	65.80%	61.80%	**90.90%**	**73.10%**
	3-5 shops	32.90%	38.20%	9.10%	26.90%
	6-8 shops	1.30%	0.00%	0.00%	0.00%
	More than 8 shops	0.00%	0.00%	0.00%	0.00%
B12) How many items do you regularly purchase per shopping trip? (SA)	1-3 items	**79.70%**	**85.30%**	**81.80%**	**84.60%**
	4-6 items	15.20%	8.80%	18.20%	15.40%
	7-10 items	5.10%	2.90%	0.00%	0.00%
	11 items or more	0.00%	2.90%	0.00%	0.00%

4.2.4.4 Behavior of mobile application usage

45.5% of Value for Money Searcher uses mobile application everyday which is the highest proportion and 68.2% of them uses for updating fashion trend and browsing product. Unexpected Users uses fashion mobile application for online shopping the most among all groups at 67.6%. The purpose of Personalization Searchers is for browsing products at 76.9%. For Urbanized Users, they use 1-2 times per week at 32.9% and using for different purpose that is not significantly outstanding.

Table 4.10 Behavior of fashion mobile application usage of four segments

		Urbanized User (n=79)	Unexpected User (n=34)	Value for Money Searcher (n=22)	Personalization Searcher (n=26)
C3) How often do you use mobile application for fashion purpose? (SA)	Less than once a week	13.90%	14.70%	9.10%	30.80%
	1-2 times per week	32.90%	29.40%	31.80%	26.90%
	3-4 times per week	20.30%	20.60%	9.10%	15.40%
	5-6 times per week	2.50%	5.90%	4.50%	0.00%
	Everyday	30.40%	29.40%	**45.50%**	26.90%
C4_0) Update fashion trend	Yes	53.20%	44.10%	**68.20%**	50.00%
	No	46.80%	55.90%	31.80%	50.00%
C4_1) online shopping	Yes	59.50%	**67.60%**	54.50%	65.40%
	No	40.50%	32.40%	45.50%	34.60%
C4_2) browsing product	Yes	41.80%	61.80%	72.70%	**76.90%**
	No	58.20%	38.20%	27.30%	23.10%
C6) Have you ever recommended someone to use fashion mobile application? (SA)	Yes	46.80%	**50.00%**	36.40%	38.50%
	No	53.20%	50.00%	63.60%	61.50%

4.2.5 The satisfaction and engagement level of each segment

After rating the importance of all factors, the questionnaire included the measurement of satisfaction level and engagement level at the 1-5 scale. The engagement level of mobile application usage is classified into four different levels including 1) download 2) spend longer time or more frequent 3) use it regularly and 4) recommend to others. Value for Money Searchers occupied the top rank of four out of five of the measurement including satisfaction, download, spend longer time or more frequent, and use it regularly. For recommending application to others, they got second rank while Urbanized Users have 0.15 higher mean than Value for Money Searcher.

Table 4.11 Satisfaction and Engagement Level of four segments

	Mean				
Engagement Level	**Urbanized User (n=79)**	**Unexpected User (n=34)**	**Value for Money Searcher (n=22)**	**Personalization Searcher (n=26)**	**P-value**
E1) What is your level of satisfaction toward fashion mobile application applying the aforementioned factors?	4.32	4.09	**4.41**	4.15	0.237
E2) Will you download the fashion mobile application applying aforementioned factors	4.52	4.18	**4.64**	4.08	**0.005**
E3) Will you spend longer time or more frequent on fashion mobile application applying aforementioned factors?	4.16	4.18	**4.41**	4	0.222
E4) Do you plan to use it regularly?	4.15	4	**4.45**	4.04	0.223
E5) Will you recommend the application to others?	**4.29**	3.94	4.14	4.08	0.172

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

In conclusion, the total respondents of 161 are divided into four segments based on the rating of 23 important factors toward fashion mobile application engagement using factor analysis, two-step cluster analysis, ANOVA, and frequency analysis. Then, main characteristics are described by demographic, shopping behavior, and behavior of mobile application usage as follows:

Segment 1: Urbanized users (n=79, 49% of total respondents)

Urbanized users are sociable and convenient-oriented people. They care social status to compete with friends, want to interact with other shoppers, have fun activities or gamification, and influenced by friends, acquaintances, influencers, bloggers, and celebrities. Moreover, they prefer convenient life and rated well-designed application and easy to use relatively high. This group has the lowest average income at THB 36,107 per month, or THB 4,638 lower than mean resulting in spending average budget per shopping trip slightly lower than average. For fashion mobile application usage, half of them use more than three times a week and using for different purpose that is not significantly outstanding. Interestingly, they have the highest probability to recommend fashion mobile application to others if it satisfies them.

Segment 2: Unexpected users (n=34, 21.1% of total respondents)

Unexpected users don't care any factors at all comparing to other groups. In particular, personalization was paid attention the least. The income level is approximately equal to the mean of four segments which is the third rank while spending average budget per shopping trip the highest. More than half of them prefer purchasing international brand and use fashion mobile application less than 4 times a week for online shopping purpose.

Segment 3: Value for money searcher (n=22, 13.7% of total respondents)

Value for Money Searchers are an incentive-oriented, and prefer a certain level of personalization. They can be attracted by giving incentives such as incentive for visiting stores, purchasing products, or repurchasing products. This group has the highest average income leading to the highest spending of average budget per shopping trip. They like to go window shopping or browsing the products and they regularly purchase branded product including 50% for local brand / house brand and 40.9% for international brand. Interestingly, this group uses fashion mobile application every day for updating fashion trends and browsing the product that aligned with their offline shopping behavior.

For the satisfaction and engagement level, this group has the highest satisfaction, and likely to download, spend longer time or more frequent, and use it regularly the most.

Segment 4: Personalization searcher (n=26, 16.1% of total respondents)

This group loves all sorts of personalization i.e. personalized promotion, in-app exclusive promotion, providing nearby information including stores and promotions, and want to have a better in-store experience including sales service and convenient payment system. Moreover, they search for many kinds of information i.e. shops, styles, and customer review. Thus, they are information seeker for a better quality of life. This group has the average income slightly more than mean and occupies the second rank; however, they spend average budget per shopping trip the least. Almost of them set purpose for their shopping and they go shopping for seeking the specific items for particular occasions. More than half of them use fashion mobile application less than two times a week and use for browsing products.

5.2 Recommendations

For the new fashion mobile application, based on the mean comparison of the satisfaction and engagement level among four segments, Value for Money Searcher should be the first target of new fashion mobile application because they have highest satisfaction level and likely to engage the most comparing to other segments. Additionally, they have the highest purchasing power including income level and shopping budget.

Thus, the recommended features to attract this group is to develop the user-friendly and incentive-oriented features including 1) In-app exclusive promotion 2) Incentive for repurchasing products and 3) Incentive for purchasing products that are the top three important factors of this group accordingly. (See Appendix B)

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APPENDICES

Appendix A
Questionnaire

Definition

- **Fashion mobile application** is a mobile application related to fashion purpose. Not only online shopping or e-commerce, but also fashion content, lifestyle, fashion community, and so on.

Remark

- SA = Single Answer
- MA = Multi Answer
- OA = Open Answer

Section A: Screening questions

1) Have you ever used mobile application for fashion purpose? (SA)
   (Fashion purpose are including online shopping, update fashion trend/content, browsing fashion items in social media, etc.)
   [ ] Yes, I've **ever** used for fashion purpose
   [ ] No, I've **never** used for fashion purpose (reject)
2) How often do you go shopping? (SA)
   [ ] Less than 1 time per 6 months (reject)
   [ ] Less than 1 time per quarter
   [ ] 1-2 times per quarter
   [ ] 1-2 times per month
   [ ] 3-4 times per month
   [ ] 5-6 times per month
   [ ] More than 6 times per month

Section B: Shopping behavior questions

1) Do you consider shopping as a leisure activity? (SA)
   [ ] Yes [ ] No
2) Do you always set purpose for each shopping trip? (SA)
   [ ] Yes [ ] No

3) What are the main purposes of your shopping? (MA)

   [ ] Seeking for specific items for particular occasion

   [ ] Passing the shop during commuting.

   [ ] Relaxation

   [ ] Activity with friends

   [ ] Others, please specify ________

4) Which area do you regularly go shopping? (MA)

   [ ] Pathumwan e.g. Siam, Siam Center, Siam Discovery

   [ ] Asok e.g. Terminal 21

   [ ] Thong lor e.g. The Maze

   [ ] Rama 9 / Ratchadapisek e.g. The street, Esplanade, Train market

   [ ] Chatujak / Lad phrao e.g. Central Ladphrao, Union Mall

   [ ] Ekamai / Ram Indra e.g. CDC, The Crystal

   [ ] Bangna e.g. Central Bangna, Maga Bangna

   [ ] Changwattana

   [ ] Others (please specify)

5) What type of shopping area do you regularly go shopping? (SA)

   [ ] Outdoor flea market e.g. Chatuchak, JJ Green, Train market

   [ ] Indoor flea market e.g. Union Mall, Platinum

   [ ] Department store e.g. The mall, Central

   [ ] Hypermarket e.g. Tesco Lotus, Big C

   [ ] Community Mall e.g. Crystal Park, The Crystal, The Circle, The Walk

   [ ] Fashion event e.g. Zaap on sale, TGIF

   [ ] Siam Square

6) What kind of brands do you regularly purchase? (SA)

   [ ] No brand

   [ ] Local brand / House brand

   [ ] International brand

7) Do you go shopping mostly in weekdays or weekends/holidays? (SA)

   [ ] Weekdays

   [ ] Weekends/holidays

8) During weekdays, what time do you regularly go shopping? (SA)

[ ] In the morning (8:00 – 10:59)

[ ] During lunch break (11:00 – 12:59)

[ ] In the afternoon (13:00 – 17:59)

[ ] In the evening (18:00 – 22:00)

9) During weekends/holidays, what time do you regularly go shopping? (SA)

   [ ] In the morning (8:00 – 10:59)

   [ ] During lunch break (11:00 – 12:59)

   [ ] In the afternoon (13:00 – 17:59)

   [ ] In the evening (18:00 – 22:00)

10) How many shops do you go window shopping, but not buy, per shopping trip? (SA)

   [ ] 1-5 shops

   [ ] 6-10 shops

   [ ] 11-15 shops

   [ ] 16-20 shops

   [ ] More than 20 shops

11) How many shops do you regularly purchase per shopping trip? (SA)

   [ ] 1-2 shops

   [ ] 3-5 shops

   [ ] 6-8 shops

   [ ] More than 8 shops

12) How many items do you regularly purchase per shopping trip? (SA)

   [ ] 1-3 items

   [ ] 4-6 items

   [ ] 7-10 items

   [ ] 11 items or more

13) What is your average budget per shopping trip? (SA)

   [ ] Less than 500 baht

   [ ] 501 – 1,000 baht

   [ ] 1,001 – 1,500 baht

   [ ] 1,501 – 2,000 baht

   [ ] 2,001 – 2,500 baht

[ ] 2,501 – 3,000 baht

[ ] 3,001 – 5,000 baht

[ ] 5,001 – 7,000 baht

[ ] 7,001 baht or more

Section C: Behavior of using mobile application

1) How long do you spend time using mobile application for general purpose per day? (OA)

   ____________ hours

2) How long do you spend time using mobile application for fashion purpose per day? (OA)

   ____________ hours

3) How often do you use mobile application for fashion purpose? (SA)

   [ ] Less than once a week

   [ ] 1 – 2 times per week

   [ ] 3 – 4 times per week

   [ ] 5 – 6 times per week

   [ ] Everyday

4) What are the purpose of using fashion mobile application? (MA)

   [ ] Update fashion trend

   [ ] Online shopping

   [ ] Browsing products

   [ ] Others, please specify ___________

5) What is your level of satisfaction toward existing fashion mobile application? (SA)

   [ ] Highly satisfied

   [ ] Satisfied

   [ ] Neither satisfied nor dissatisfied

   [ ] Dissatisfied

   [ ] Highly dissatisfied

6) Have you ever recommended someone to use fashion mobile application? (SA)

   [ ] Yes (Go to Q22)

[ ] No

7) What is the name of fashion application you recommended? (OA)

____

8) Please specify the reason why you recommended (OA)

____

Section D: Customer perceived value toward fashion mobile application engagement

Please rate the importance of following factors toward fashion mobile application engagement

(1 = Not important, 7 = Highly important)

Factors	1	2	3	4	5	6	7
1) Variety of shops							
2) Variety of styles							
3) Ease of use							
4) Well-designed UX/UI							
5) Updated fashion trends or contents							
6) Nearby store locator							
7) Product recommendation							
8) Enhance instore experience: scan barcode to see product details							
9) Enhance instore experience: sales service							
10) Enhance instore experience: convenient payment system							
11) Provide nearby shops' promotion							
12) In-app exclusive promotion							

Factors	1	2	3	4	5	6	7
13) Personalized promotion							
14) Incentive for visiting stores i.e. point collection							
15) Incentive for purchasing products							
16) Incentive for repurchasing products							
17) Customer review							
18) Shopper community: interact with other shoppers							
19) Shopper community: recommend product/content to your friends							
20) Social status: compete among users, level of users							
21) Fun activities / Gamification							
22) Influencers/bloggers/celebriti es use the application							
23) Friends and acquaintances use the application							

Section E: Level of engagement questions

1) What is your level of satisfaction toward fashion mobile application applying the aforementioned factors? (SA)

   [ ] Highly satisfied

   [ ] Satisfied

   [ ] Neither satisfied nor dissatisfied

   [ ] Dissatisfied

   [ ] Highly dissatisfied

2) Will you download the fashion mobile application applying aforementioned factors more frequent? (SA)

[ ] Definitely yes

[ ] Probably yes

[ ] Neutral

[ ] Probably not no

[ ] Definitely not no

3) Will you spend longer time or more frequent on fashion mobile application applying aforementioned factors? (SA)

[ ] Definitely yes

[ ] Probably yes

[ ] Neutral

[ ] Probably not no

[ ] Definitely not no

4) Do you plan to use it regularly? (SA)

[ ] Definitely use

[ ] Probably use

[ ] Neutral

[ ] Probably not use

[ ] Definitely not use

5) Will you recommend the application to others? (SA)

[ ] Definitely recommend

[ ] Probably recommend

[ ] Neutral

[ ] Probably not recommend

[ ] Definitely not recommend

6) What are your actual need for fashion mobile application, please specify_______ (OA)

Section F: Demographic characteristics

1) What is your gender? (SA)

[ ] Male [ ] Female

2) What is your age? (SA)

[ ] 15 years or less

[ ] 16 – 22 years

[ ] 23 – 30 years

[ ] 31 – 40 years

[ ] 41 – 50 years

[ ] 51 years or more

3) What is the highest degree or level of education you have completed? (SA)

[ ] Less than high school

[ ] High school graduate (includes equivalency)

[ ] Associate’s degree

[ ] Bachelor’s degree

[ ] Master’s degree

[ ] Doctorate’s degree and over

[ ] Others, please specify _________________________

4) What is your current occupation? (SA)

[ ] Student

[ ] Corporate employee

[ ] Government officer / State enterprise officer

[ ] Self-employed/Freelance

[ ] Business owner

[ ] Unemployed

[ ] Other, please specify _________________________

5) What is your monthly income? (SA)

[ ] 15,000 baht or less

[ ] 15,001 – 20,000 baht

[ ] 20,000 – 25,000 baht

[ ] 25,001 – 30,000 baht

[ ] 30,001 – 40,000 baht

[ ] 40,001 – 50,000 baht

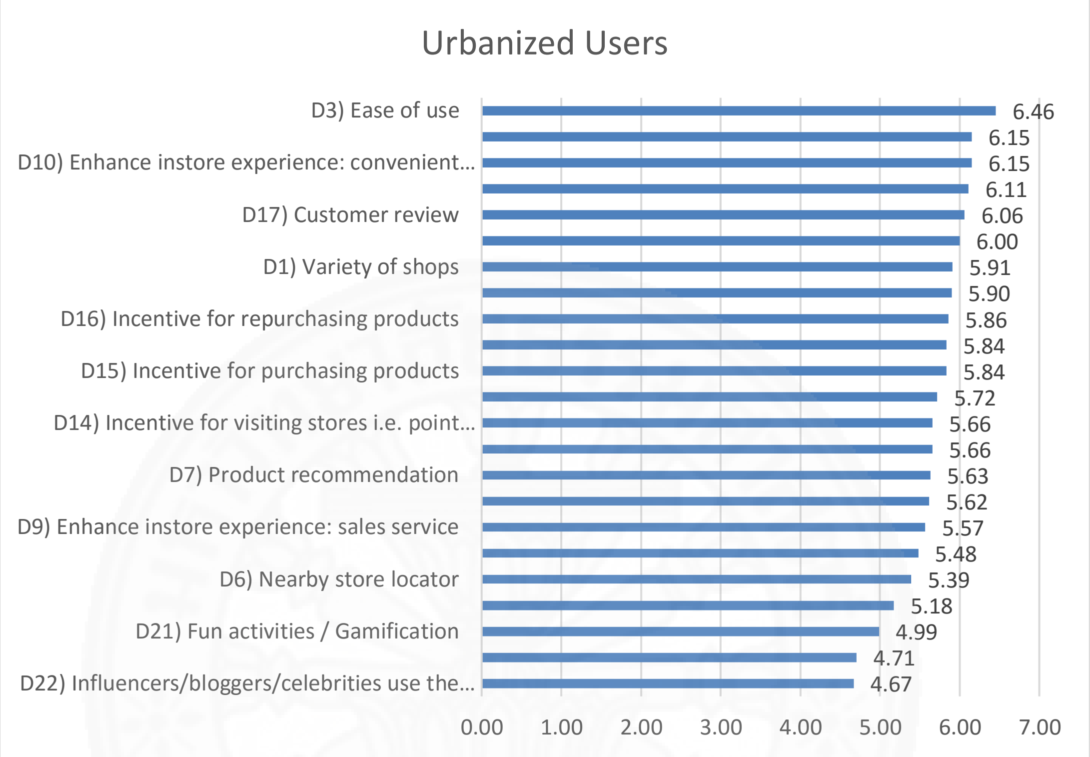
[ ] 50,000 – 70,000 baht

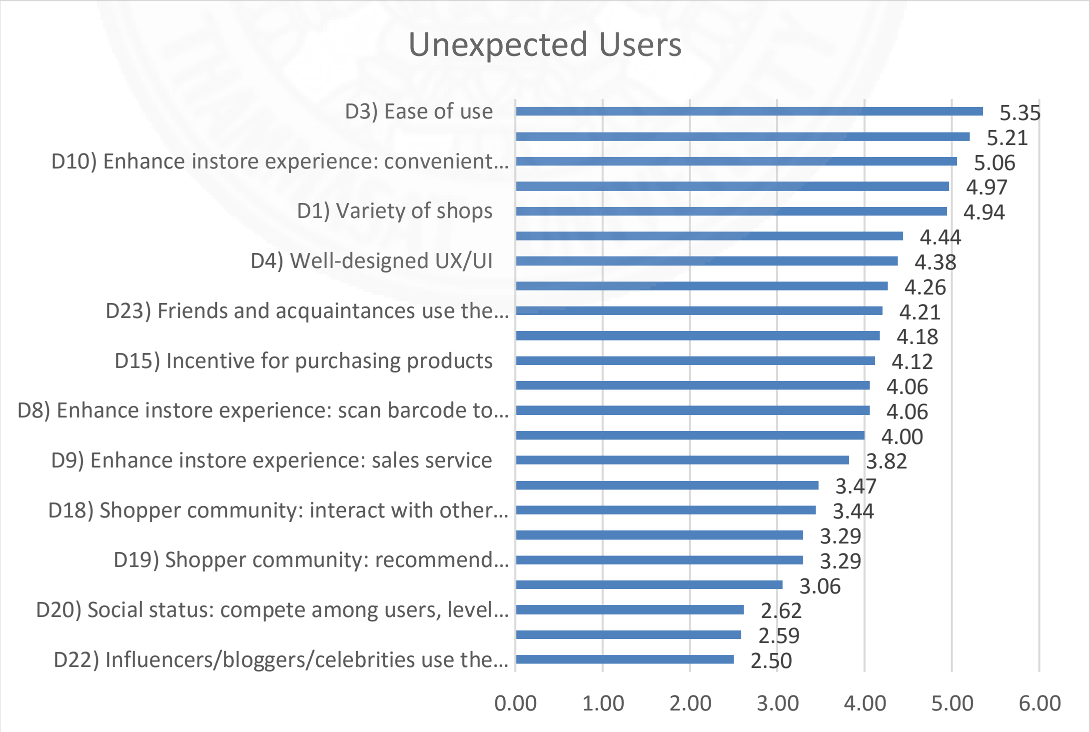
[ ] 70,001 – 100,000 baht

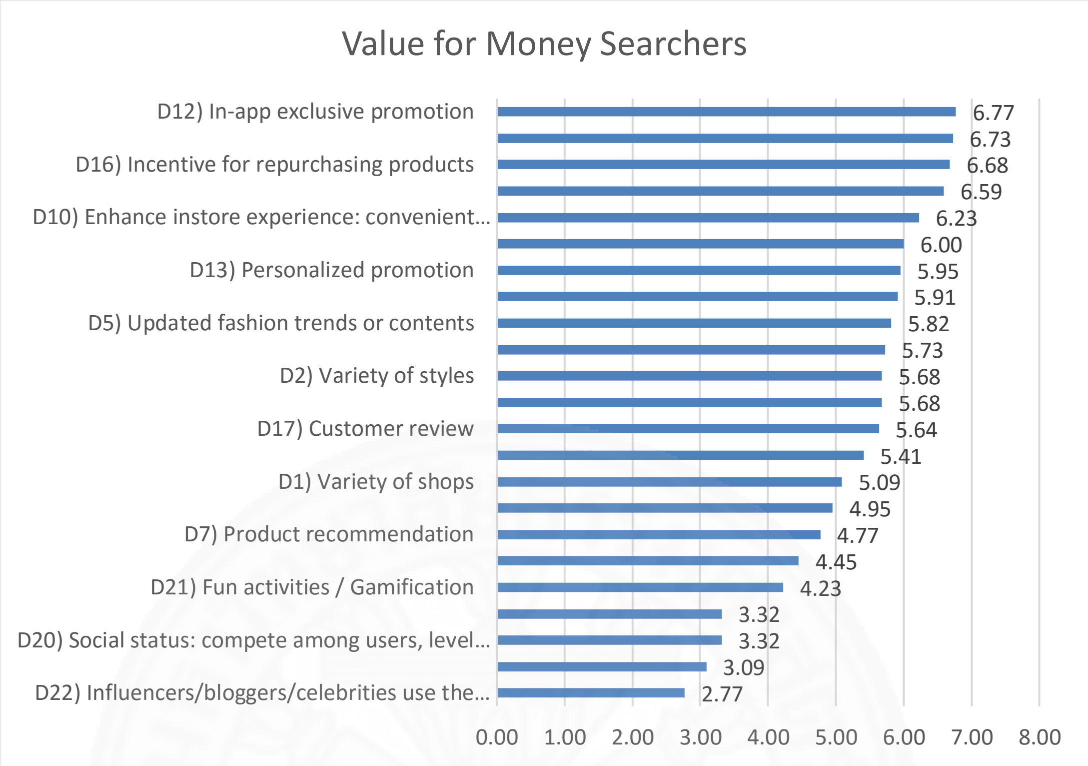
[ ] 100,001 baht or more

Appendix B

The mean of important factors for four segments






Value for Money Searchers
D12) In-app exclusive promotion
D16) Incentive for repurchasing products
D10) Enhance instore experience: convenient...
D13) Personalized promotion
D5) Updated fashion trends or contents
D2) Variety of styles
D17) Customer review
D1) Variety of shops
D7) Product recommendation
D21) Fun activities / Gamification
D20) Social status: compete among users, level...
D22) Influencers/bloggers/celebrities use the...
6.77
6.73
6.68
6.59
6.23
6.00
5.95
5.91
5.82
5.73
5.68
5.68
5.64
5.41
5.09
4.95
4.77
4.45
4.23
3.32
3.32
3.09
2.77
0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00


Personalization Searchers
D10) Enhance instore experience: convenient...
D12) In-app exclusive promotion
D1) Variety of shops
D17) Customer review
D6) Nearby store locator
D9) Enhance instore experience: sales service
D4) Well-designed UX/UI
D18) Shopper community: interact with other...
D15) Incentive for purchasing products
D14) Incentive for visiting stores i.e. point...
D20) Social status: compete among users, level...
D22) Influencers/bloggers/celebrities use the...
6.38
6.27
6.23
6.08
6.04
6.00
5.85
5.81
5.73
5.62
5.62
5.62
5.58
5.50
4.65
4.58
4.12
4.04
4.00
3.96
3.42
3.38
2.81
0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00

BIOGRAPHY

Name	MISS CHATTRAPORN PETCHDEMANEENGAM
Date of Birth	October 25, 1988
Educational Attainment	2007 – 2011: Bachelor Degree of Engineering, Major in Computer Engineering, Chulalongkorn University
Work position	Business Development Dosetech Co.,Ltd.
Work Experiences	2011 – 2013: IT Management Trainee, Siam Commercial Bank PCL. 2013 – 2015: Service Availability Technical Analyst Siam Commercial Bank PCL. 2017 – present: Business Development, Dosetech Co.,ltd.