



**A STUDY OF OPPORTUNITIES FOR DEVELOPING
AN ONLINE CHANNEL PRESENCE FOR
HYPERMARKETS IN THAILAND**

BY

MISS WIMONRUT LAOHAPONGPUN

**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
ACADEMIC YEAR 2015
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INDEPENDENT STUDY

BY

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ENTITLED

A STUDY OF OPPORTUNITIES FOR DEVELOPING AN ONLINE CHANNEL
PRESENCE FOR HYPERMARKETS IN THAILAND

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

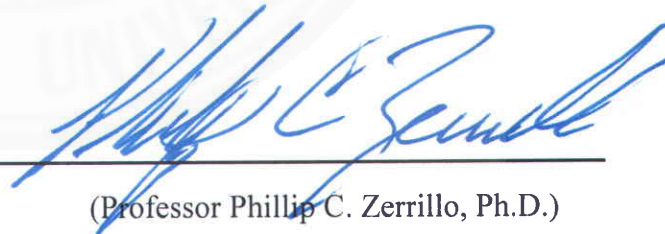
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Author	Miss Wimonrut Laohapongpun
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ABSTRACT

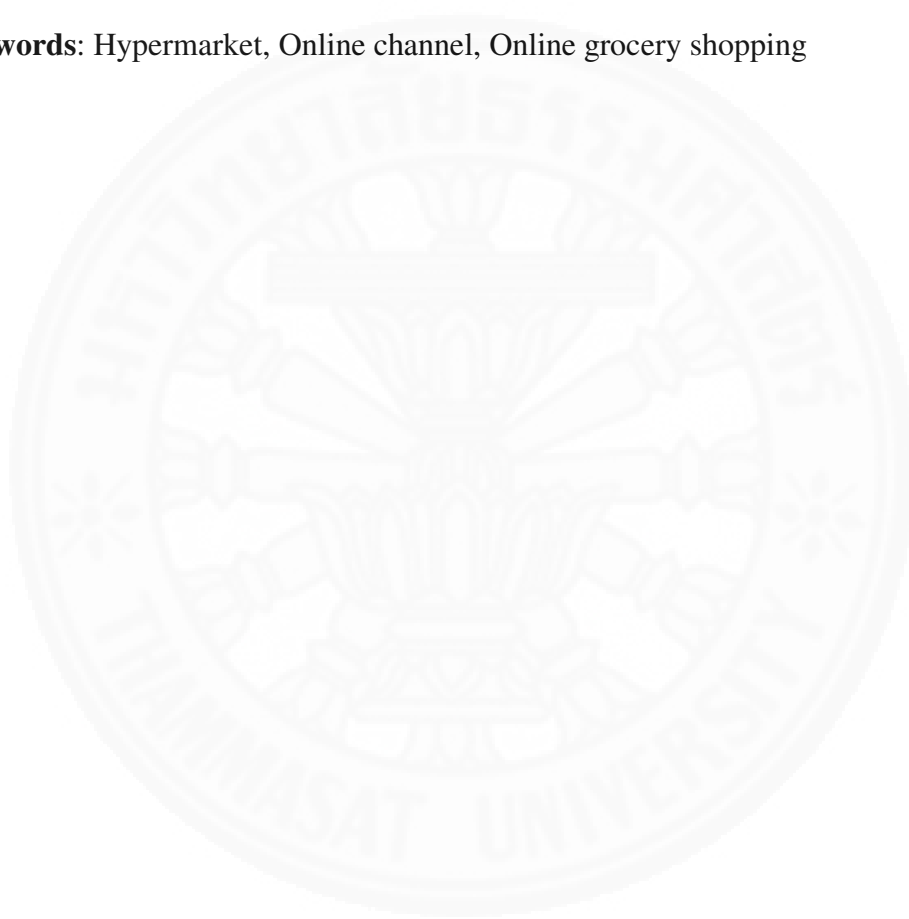
It goes without saying that internet retailing has been put in a spotlight of Thailand's economy. The growth rose from THB 14.64 billion in 2009 to THB 35.6 billion in 2014 with an expected expansion of 13% for Compound Annual Growth Rate (CAGR). Many businesses have turned to invest on online platforms to increase sales, including successful megastores like Big C and Tesco Lotus. However, reports on online sales show that these hypermarkets have managed to gain no more than 3.7% of total market shares, despite their capacity to invest on marketing.

This research will analyze the reasons that Thai hypermarkets have not had a strong online presence. It will identify (1) segmentation of online grocery shoppers, (2) triggers or strategies that are likely to help increase grocery customer's preference of the online alternatives, and (3) barriers that prevent customers from starting or continuing going online for their grocery shopping.

Both qualitative and quantitative market study methodologies were adopted. In-depth interviewing and desk research were carried out to collect qualitative information, while survey questionnaires were distributed and analyzed using Statistical Package for the Social Sciences (SPSS) to find quantitative data.

The findings of this research could well be useful for entrepreneurs and decision-makers in hypermarket industry in understanding consumer behaviors toward online grocery shopping. The businesses can properly select target groups that match capacities and mandates of the companies, hence, design strategies that practically respond to the market's needs.

Keywords: Hypermarket, Online channel, Online grocery shopping



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Miss Wimonrut Laohapongpun



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CHAPTER 1

INTRODUCTION

According to a research conducted by Euromonitor (2015), the accelerated development of internet infrastructures, and the consequential increase of smartphone users in Thailand are the main causes of immense growth of internet retailing, from THB 14.64 billion in 2009 to THB 35.60 billion in 2014. The report further suggests that the internet retailing is expected to continue growing at a CAGR of 13%. Such impressive growth rate has invited a number of local retailers to go online as a way to expand their reach to customers.

Hypermarkets have become an integral part of Thai people's livelihood in the past decade. Tesco Lotus and Big C Supercenter PCL command, respectively, the second (11.8%) and third (6.9%) largest market shares in grocery retail in Thailand. Such success has prompted the megastores with confidence to introduce their online stores to Thailand. Nevertheless, market shares of both companies' online sales are never more than 3.7% of total market shares of the online retails.

Big C started its shopping website in 2011, but even until 2014, the internet retailing was still accounted for only 0.85% of total company sales. Tesco Lotus implemented the online option on the foundation of the successful UK's tesco.com, yet over a year after its launch in Thailand in 2013, its online sales was accounted for only 0.12% of total company sales. There is a clear need to find out what has gone wrong in the application of online grocery shopping in Thailand and what needs to be improved.

This research aims to analyze why Thai hypermarkets have not had a strong online presence. It will identify (1) segmentation of online grocery shoppers, (2) triggers that are likely to help increase grocery customer's preference of the online alternatives, and (3) barriers that prevent customers from fully utilizing online channels for their grocery shopping.

The findings of this research can be a guideline for entrepreneurs and decision-makers in hypermarket industry to understand consumer behaviors toward online grocery shopping. With the proper understanding, a company can effectively

select target groups that match its capacities and mandates, and can implement strategies that answer to the market's needs.



CHAPTER 2

REVIEW OF LITERATURE

2.1 Situational factors toward customer's preference

A study has shown that customers consider costs, risk, convenience and enjoyment in choosing between shopping food online and in-store. These points of consideration depend on situations, such as cost of delivery, purpose of the trip out of home, availability of time to shop and travelling time to a physical store (Huang & Oppewal, 2006). These situational factors, when present and affect the customer's day-to-day planning, are the keys to customer's decision to buy from online stores, reduce frequency for shopping, or stop online shopping. (Hand, Dall'Olmo Riley, Harris, Singh & Rettie, 2009).

2.2 Strengths and weaknesses of online grocery shopping

According to the aforementioned study, it can be concluded that consumers tend to perceive online grocery shopping as better than in-store shopping for that it offers convenience, wider view of product range and cheaper prices. However, many still believe that there are drawbacks, for instance, risk of receiving low-quality goods, loss of enjoyment in grocery shopping (Ramus & Asger Nielsen, 2005), danger of unsecured online payment and long wait time for delivery (Koyuncu & Bhattacharya, 2004).

Raijas (2002) concludes that, in the greater Helsinki area context, the top-three aspects that make customers prefer grocery e-shopping are (1) home delivery service, (2) time saving and (3) ease of ordering. However, ironically, the top-three problems that the customers have faced in shopping online are (1) difficulties in searching for information, (2) confusion of product categorization and (3) higher pricing relatively to conventional stores.

2.3 Possible success factors

In a customer data-mining study to implement online shopping system for hypermarkets, Liao, Chen and Lin (2011) recommend that online shopping operators can increase customer's awareness through personalizing sale offers that are compatible to lifestyle and needs of each customer. The key sale offers that could be considered are (1) customized product bundling, (2) database marketing which produces electronic catalogs of designs and products that match the customer's preference and (3) providing various and flexible home delivery options. If an online grocery store can deliver these three elements effectively, it is likely to increase customer's attraction to its website.

2.4 Segmentation of online grocery shoppers

Rohm and Swaminathan (2004) divide grocery e-shoppers into 4 segments, names in accordance to factors that the segments prioritize. These are (1) convenience shoppers, (2) variety seekers, (3) balanced buyers and (4) store-oriented shoppers.

In the US context, grocery e-shoppers tend to have higher annual income than their conventional counterparts, who might or might not buy other products online, but never for groceries. For grocery e-shoppers, online grocery retails are more communicable, more compatible to their lifestyles and less complex than conventional stores (Hansen, 2005).

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research objectives

- 1) To elaborate on segmentation of online grocery shoppers in Thailand using existing attributes as basis.
- 2) To identify triggers or strategies that can influence customer's decision and preference to use online channels for shopping at the hypermarkets. The triggers are defined by their impacts on these two groups of shoppers: the first-time adopters of online grocery store and the return customers.
- 3) To identify barriers that obstruct customers from fully approaching hypermarket's online channel in the context of Thailand. The analysis on the barriers incorporate two steps: First, it focuses on evaluating actual service attributes of current online grocery stores in comparison to ideal service attributes or customer's expectation. Second, it addresses detailed reasons that customers reject the online platforms.

3.2 Research Design

In order achieve the above mentioned objectives; both exploratory and descriptive research approaches must be employed.

3.2.1 Exploratory Research: Conducted by two methods, namely secondary data analysis (desk research) and in-depth interviewing, this phase of research explores consumer's perception toward online grocery stores to identify influential factors for customer's decisions. The findings at this stage are used to design questionnaires for the descriptive research.

3.2.1.1 Secondary data analysis: Desk research was carried out to collect data mostly from public sources, e.g. websites, academic journals, market research publication, in order to gain background information on current situation of hypermarket online initiatives in Thailand.

3.2.1.2 In-depth interview: The interviews were conducted with the aim to gain more insight on perspectives toward online grocery shopping of both current users and non-users. Information gathered from the interviews would be analyzed to find key factors that either trigger or prevent opportunities to shop groceries online, and would be included in the questionnaire used in the descriptive research phase.

Fifteen people were selected by convenience sample method for one-on-one interviewing. The target respondents were from different ages, genders, occupations and socioeconomic status. Non-directive interview method was applied to allow elaborative answers, in order to gain unlimited insights of reasons behind consumer's behaviors. (Aaker, Kumar, Leone & Day, 2013). Each interview session took 45-60 minutes. The information gathered from fifteen interview sessions (excluding pre-test sessions) has enabled the researcher to classify the interviewees into three groups. These are:

(1) **Online grocery-shopping adopter:** A person who has purchased groceries online at least one time in the past three months;

(2) **Online shopping adopter:** A person who has purchased other products or services online (but not groceries) for at least one time in the past three months; and

(3) **Non-adopter of online shopping:** A person who has never purchased anything online at least over the past three months.

3.2.2 Descriptive Research: The approach aims to shed light to characteristics of the target market by means of analyzing consumer's attitudes, needs and satisfaction. The descriptive research was conducted using questionnaire, which was designed to gather a wide range of descriptive data from diverse types of respondents (Aaker, Kumar, Leone & Day, 2013).

3.2.2.1 Questionnaire

(1) Objective: Establishing profile of the target groups — their thoughts, values and behaviors — will benefit as a process to find out the triggers that will potentially result in the increase of online shoppers for groceries. The questionnaire was designed to evaluate customer satisfaction of current service attributes, define influential factors for repurchasing and identify possible barriers of online grocery shopping.

(2) Questionnaire design: The questionnaire was divided into three main parts. (Appendix 1: Questionnaire) The questionnaire was distributed through both offline and online channels in order to obtain 200 respondents. 10 sets of surveys were launched for pilot session to check for sequencing and comprehensibility of questions.

(2.1) Screening Questions: The first part of questionnaire consists of three screening questions which aim to define and categorize respondents into groups. The first question divides respondents into online shoppers and non-online shoppers within the timespan of three months. The second question finds out who among online shoppers also shop groceries online. The final screening question aims for non-online shoppers, and non-adopter of online shopping to evaluate their willingness to try online grocery shopping. The screening questions have grouped the respondents into the following:

- **Non-rejector:**

- o **User:** A person who has purchased groceries online at least one time in the past three months. This group is equivalent to the group “online grocery-shopping adopter” from the interview session.

o **Non-user:** A person who has either purchased other products or services over the internet but not groceries for at least one time in the past three months (equivalent to “online shopping adopters”), or has never purchased anything over the internet in the past three months (equivalent to “non-adopters of online shopping”) but is willing to try online grocery shopping in the future.

- **Rejector:** A person who refuses to adopt online grocery shopping in any circumstance.

(2.2) Main Questions: The questions concern features or offers that trigger someone’s decision to start shopping groceries online, ideal service attributes and features or offers that compel repurchasing. This part allows the researcher to learn about influential factors in relation to the purchasing behavior of the target market. This information can be used to evaluate whether current online store services have reached expectation of prospective customers or not.

(2.3) Demographic Questions: A set of generic questions to gather personal demographic data, such as gender, age, income, occupation and type of residence.

(3) Sampling method: The researcher approached respondents by means of convenience sampling or non-probability sampling. Therefore, the outcome of the questionnaires cannot be used to generalize the target market or to be seen as the majority of the target market.

(4) Sample selection: The respondents are from the age range between 18 to 65 years old, live in Bangkok or vicinity areas, have access to internet and have capability to make online purchases. 15 respondents were interviewed individually, while 200 respondents were approached for questionnaires fill-outs.

(5) Survey recruiting plan: The screening questions of the questionnaires have separated rejectors from those with potential to explore online grocery shopping. The rejectors would be directed by the questionnaires to the section that explore their reasons for rejection. The non-rejectors would be requested to complete full list of questions. The questionnaire was distributed via both online and offline channels until it reached 200 valid respondents.

(5.1) Offline Channel: Printed questionnaire copies were distributed in branches of both Tesco Lotus and Big C in Bangkok metropolitan areas. Approached customers who were not convenient to complete the printed questionnaire at the time were asked for email addresses for the researcher to send Uniform Resource Locator (URL) of the online questionnaire to them. A reminder email was also scheduled three days after the URL was sent.

(5.2) Online Channel: URL of the online questionnaire was disseminated through social media, websites and blogs.

3.3 Data Analysis

The data analysis encompasses both qualitative analysis in the explanatory research phase and quantitative analysis in the descriptive research phase.

3.3.1 Qualitative analysis in the exploratory research: Information received from the in-depth interviews was analyzed using qualitative methods to identify patterns of attitudes, behaviors and key variables related to adoption of online grocery shopping.

3.3.2 Quantitative analysis in descriptive research: The questionnaire contains close-ended questions with multiple choices and rating scale from one to five, which could be transcribed into statistical data summary. Statistical Package for the Social Sciences (SPSS) was employed as a tool to analyze frequencies and correlations as well as related statistic-oriented conclusion useful to the study of the target market.

3.4 Research limitations

The sampling method to recruit respondents was a non-probability sampling method. That is, it was based on convenience sampling. Therefore, the result cannot be used to make sweeping generalization about the target population.

Information from 15 in-depth interviews and 200 survey questionnaire answers, in addition, is based on opinions and experience of respondents living in the Bangkok metropolis, thus, may not wholly reflect attitudes and behaviors of Thai people in general.

Had the researcher more time and financial resources to conduct survey targeting wider and more diverse groups of target market, i.e. nationwide data collection, the conclusion of the data analysis would more accurately represent the baseline information of Thai people toward online grocery shopping.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Key findings from exploratory research

4.1.1 Secondary research

4.1.1.1 Current situation of hypermarkets in Thailand: According to SCB Economic Intelligence Center (EIC), grocery stores in Thailand could be classified into 3 types: (1) convenient stores, such as 7-11 and FamilyMart, (2) supermarkets, such as Tops Supermarket and Villa Market, and (3) hypermarkets, such as Tesco Lotus and Big C. Although at present hypermarket business owns the largest portion of market shares in Thailand, covering 10 branches per the population of 1 million people, the growth rate of its market shares nowadays has a tendency to decline (Amornvivat, Ratanapinyowong, Sayamanont & Arakwichanan, 2014). This is because of changes in demography (e.g. smaller size of families), consumer's lifestyles (e.g. mobility and frequent changes of resident locations), and consumer's preference (e.g. convenience-oriented). As a result, small-sized convenient stores have gradually gained their proportion of consumer's preference. To boot, there is a growing number of small grocery stores which require less financial investment and allow more flexibility of spaces and locations to set up. Considering these disadvantages, hypermarkets are facing difficulties to survive in the industry.

4.1.1.2 Factors of opportunity for online groceries in Thailand: The SCB Economic Intelligence Center (EIC) also investigates key factors that could support the growth of online grocery retails in Thailand. These factors can be interpreted as follows:

(1) Rapid increase of smartphone usage in relation to worldwide technology progress: Within these recent years, Thailand has witnessed the improved accessibility to internet for all segments of population. This has equipped anyone with purchasing power of a smartphone the access to online shopping services.

(2) Transformation of working women from a trend to a lifestyle: It is undeniable that more and more females are seeking options to achieve

balance between their contradictory roles as housewives and family's bread-winners. Online grocery shopping was, thus, invented to serve the need for time saving and convenience.

(3) Ever-intensifying urban lifestyle: Online grocery shopping may be the answer to travel time and expense saving for the hectic city life.

(4) Space limitation: The online channel is an inviting option for hypermarket operators as it does not require a physical megastore to be built in particular neighborhood to attract more people. It cuts down issues to consider, including finding locations, construction costs, control from city planning and restriction of redevelopment laws.

4.1.1.3 Online grocery models: An article, "A Fresh Look at Online Grocery - Consumer Products & Retail" by A.T. Kearney (2015) explains about four business models of online grocery retailers. These models are different for their types of delivery services (e.g. home delivery and self pick-up) and locations for pick-up (e.g. in-store and warehouse).

(1) Store-to-home: Grocers deliver goods from their store that is closest to the customer's residence. Most retailers choose to provide this option as a standard option, as it is proven to give positive customer's feedbacks in terms of convenience and fast delivery. Both Tesco Lotus and Big C provide this service to their customers.

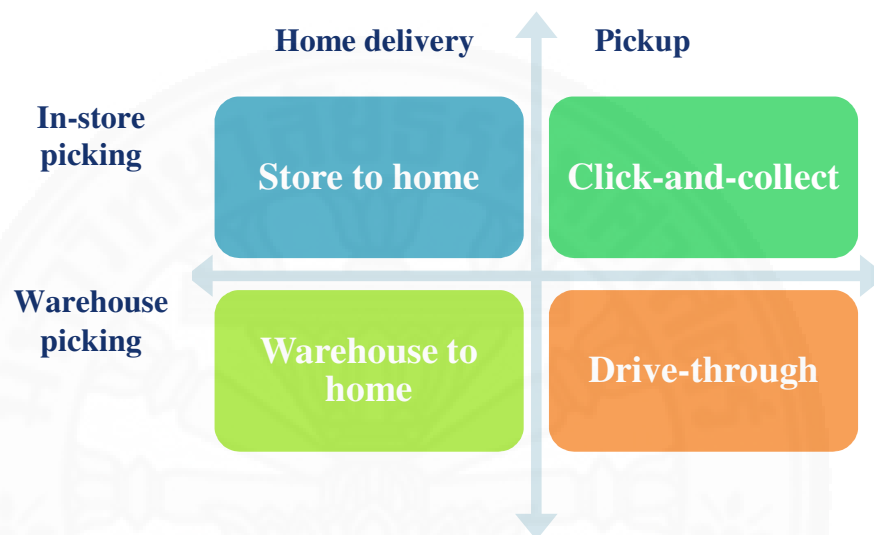
(2) Click-and-collect: The shopper collects goods at grocery stores closest to their neighborhood. This option tends to be offered as the secondary option from store-to-home. This model might be less attractive if there is a service fee or if the consumers have to spend time finding parking spots. In Thailand, Tesco Lotus and Big C also provide this option for customers.

(3) Warehouse-to-home: Many online grocery stores that do not have many stand-alone shops offer deliveries from their local warehouses to customer's residence. Tesco Lotus and Big C do not offer this option yet.

(4) Drive-through: Grocery stores set up additional pick-up points near their stores or warehouses where customers can pick up their orders without leaving

their cars. This method can help the customers save time in parking. Tesco Lotus and Big C do not offer this option yet.

Figure 4.1: Business models of online grocery retailers



Source: A.T. Kearney analysis

4.1.2 In-depth interview

4.1.2.1 Findings from users: In order to gain deeper insightful information, seven people who have shopped groceries online were interviewed. Three of them are online customers of Tesco Lotus. Two are online customers of Big C. The other two have shopped at both Tesco Lotus and Big C. The results are summarized as below:

(1) Perception of online grocery shopping: When interviewing about their overall perception of online grocery shopping, the interviewees reflected about negative beliefs which could also be considered as barriers that prevent other shoppers to shop food online. Five out of seven e-shoppers used to believe that they would receive lower quality products via online channels. Four users are cautious about the security risk of online payment; therefore they prefer online grocery operators who provide various payment methods. Six respondents are worried when purchasing fresh food, such as meat and vegetables, as they do not trust that the condition of delivery transportation will not affect the freshness of the products.

(2) Triggers: Five out of seven users said that they were confident to start shopping online groceries because of the words-of-mouth from families and friends. The other two said that they adopted online grocery shopping because of reviews on websites. Users also mentioned that occasional promotions and advertisement also play a part in their decision to start grocery e-shopping.

(3) Evaluation of online groceries by the hypermarkets understudy

(3.1) Tesco Lotus: Three out of five Tesco Lotus users expressed their satisfaction with its online grocery shopping, in particular the punctual delivery service, product quality and reasonable delivery fee. The interviewees also think that Tesco Lotus website has good arrangement of product categories which facilitates easy navigation to products. Another strong point of Tesco Lotus, according to the interviews, is a wide range of products. Four users mentioned that they could even purchase frozen food, meats, and flowers from Tesco Lotus website.

(3.2) Big C: Four Big C online users agree that Big C's website provides a wide range of products. However, the web structure is rather

disorganized and confusing with frequent pop-up windows that interrupt the shopping experience. Users who have shopped both in websites of Big C and Tesco Lotus find that Big C has relatively inferior quality of delivery service in comparison to that of Tesco Lotus. Late delivery is a big concern that the interviewed Big C online customers have encountered.

(4) Factors leading to repurchasing: All users agree that the first time experience has the greatest effect to their consideration to shop online again. Three users suggested that price discount could be a convincing factor for them to become return customers. Other promotional strategies, such as extra point redemption, special occasional gifts and customized shopping lists were mentioned as potential influential factors to encourage return customers.

4.1.2.2 Findings from non-users: Eight non-users were interviewed. Five out of eight have experienced in online shopping, although not grocery shopping, while the other three have never purchased anything via online channels.

(1) Perception of online grocery shopping: All of the non-user interviewees have had good awareness of online grocery retails offered by both Tesco Lotus and Big C. Five respondents reasoned that they have decided not to adopt online grocery shopping as they still enjoy going to physical stores and hand-selecting products from shelves by themselves. Four respondents said they simply did not trust online payment security. Other secondary reasons for the rejection of online stores include complication of payment process, concern about data privacy, financial security and service quality, as well as service fee.

(2) Potential triggers for adoption of online grocery shopping: Five out of eight non-users said that they might try online grocery shopping if there are positive recommendations from their family and friends. In addition, they may consider buying from online stores, if the megastore employees recommend such option to them directly, or if advertisement has been frequently broadcasted. More importantly, if there is a system by the online grocery operators to guarantee the safety of online payment and

the quality of services, four respondents said they would agree to start purchasing online groceries.

4.2 Key findings from descriptive research

4.2.1 Demographic

4.2.1.1 Non-rejector:

(1) **Genders:** Non-rejectors consist of 44 males (accountable for 38%) and 72 females (accountable for 62%).

(2) **Ages:** Non-rejectors are present in four age groups ranging from below 25 to 49 years old: The majority of respondents are from 26 to 33 years old, accountable for 55 respondents or 47%. The second biggest group consists of 37 respondents or 32% from the age between 34 and 41 years old. 16 respondents or 14% are from 42 to 49 years, while only 8 respondents or 7% are younger than 25 years old.

(3) **Monthly Income:** The majority of non-rejectors, accountable for 36 people or 31%, have monthly income between 45,001 THB to 60,000 THB. Second largest group includes 24 respondents or 21% of non-rejectors have 30,001 THB to 45,000 THB earning per month, followed by a group of 22 non-rejectors or 19% with 15,001 THB to 30,000 THB income range and a group of 18 non-rejectors or 16% with 60,001 THB to 75,000 THB income range. 14 respondents, equivalent to 12%, are in the group of top earners at 75,001 THB and above, while only 2 respondents or 2% have earned less than 15,000 THB per month.

(4) **Occupations:** A large majority of non-rejectors, 68 respondents or 59%, work for corporate companies. 20 respondents or 17% are government employees. 14 respondents or 12% are self-employed, while 12 respondents or 10% run their own businesses. Only 2 respondents or 2% of non-rejectors are students.

(5) **Type of accommodations:** 70 respondents or 60% of non-rejectors live in condominiums, while 46 respondents or 40% of non-rejectors live in houses.

4.2.1.2 Rejector:

(1) **Genders:** The rejectors amount to 56 females or 67% and 28 males or 33%.

(2) **Ages:** Five age ranges from below 25 years old to 50 years old and above are present in this group. The majority falls between the age of 26 and 33 years old, accountable for 44 respondents or 52% of the rejectors. 17 respondents or 20% age between 34 and 41 years old, while 15 respondents, or 18% are below 25 years old. 7 respondents, or 8% of rejectors are from 42 to 49 years old. Only 1 respondent, or 1% is in the age group of 50 years old and above.

(3) **Monthly Income:** The majority or 28 respondents (accountable for 33% of rejectors) have earnings between 15,001 THB and 30,000 THB per month. 18 people or 21% of rejectors have the monthly income from 45,001 THB to 60,000 THB, while 17 respondents or 20% make 30,001 THB to 45,000 THB each month. 8 respondents or 10% of rejectors have gained less than 15,000 THB monthly. 7 respondents or 8% of rejectors have monthly income between 60,001 THB and 75,000 THB, while only 6 people or 7% of rejectors earn as high as 75,001 THB and above.

(4) **Occupations:** 55 respondents or 65% of rejectors are dominated by corporate employees. 11 respondents (13%) are government employees; 9 respondents (11%) are self-employed; whereas 8 respondents or 10% of rejectors are students. Only 1 respondent or 1% of rejectors is a business owner.

(5) **Type of accommodations:** 63 respondents or 75% of rejectors live in houses, whilst 21 respondents or only 25% live in condominiums.

4.2.2 Segmentation: Cluster analysis (TwoStep Cluster) was employed in establishing customer segmentation. Data was gathered from non-rejectors' evaluations of ten service attributes related to online grocery shopping by grading their levels of importance, derived from the five-point Likert scale. The analysis result divides customers into two segments: service-oriented customers and product-oriented customers.

4.2.2.1 Service-oriented segment: consists of 80 respondents or 70% of non-rejectors with the following profiles:

(1) **Genders:** The service-oriented customers are mostly females, accountable for 48 respondents or 60%, while there are 32 males, subject to 40% of this segment.

(2) **Ages:** Among four age ranges, the apparent majority, subject to 34 respondents or 43%, are in age group of 26 to 33 years old. The second largest group concerns 30 respondents or 38% from 34 to 41 years old. 10 respondents or 13% of the segment are from 42 to 49 years old and 6 respondents or 8% from the age below 25 years old are considered to be service-oriented.

(3) **Monthly Income:** There is a rather even spread of number of respondents in different income groups. The biggest group of service-oriented respondents have monthly earnings from 45,001 THB to 60,000 THB, countable for 20 respondents or 25%. 18 people are from income range of 30,001 THB to 45,000 THB, subject 23% of the segment. 16 respondents or 20% are in a group of 60,001 THB – 75,000 THB income range. 14 respondents or 18% are in a group of 75,001 THB and above income range. 12 respondents or 15% are in a group of 15,001 THB – 30,000 THB income range.

(4) **Occupations:** 49 service-oriented respondents or 61% make a living as corporate employees. Self-employed workers and business owners take up the same number of 11 respondents or 14% for each group. 9 respondents or 11% work for governmental agencies.

(5) Type of accommodations: The majority service seekers live in condominiums, countable for 52 respondents or 65%, whilst there are 28 respondents or 35% who are house residents.

(6) Key influential attributes of online grocery shopping: This segment is likely to decide for online grocery shopping for factors related to service quality. These are reliable service quality, reasonable delivery time, various options of payment methods, secured online payment procedures, prompt customer service supports and user-friendly websites or applications.

(7) Online grocery purchasing frequency: Despite their positive reception of online shopping, the greater part of the non-rejectors, countable for 32 respondents or 40%, never purchase online groceries. 28 respondents or 35% of segments are said to shop online groceries once a month, while 25% or 20 respondents have been using online services 2-3 times per month.

(8) Spending per time: Taken out 32 people (40%) who have never purchased groceries online, hence not legible to answer this question, among 48 non-rejectors, 33 of them or 41% averagely spend 501 to 1,000 THB when they shop online groceries. 8 respondents or 10% have spent less than 500 THB for their shopping, while 5 respondents or 6% averagely spend from 1,501 to 2,000 THB per time. Only 1 respondent or 1% is said to have spent 1,001 to 1,500 THB for e-groceries, and another one (1%) claims to have spent 2,001 THB or above each time.

(9) Top-five most frequently purchased products (in order of frequency): cleaning products, personal cares, paper products, beverages and canned food.

4.2.2.2 Product-oriented segment: comprises 36 respondents or 30% of non-rejectors with the following profiles:

(1) Genders: The majority product-oriented customers are females, countable for 24 people or 67%. There are 12 males or 33% in this segment.

(2) Ages: Among four age ranges, 58% or 21 respondents are from 26 to 33 years old. 7 respondents or 19% age between 34 and 41 years old, whereas 6

respondents or 17% are from 42 to 49 years old. Only 2 respondents or 6% are below 25 years old.

(3) Monthly Income: 16 respondents or 44% are in a group of 45,001 THB – 60,000 THB income range. 10 people or 28% of the segment is earning 15,001 THB to 30,000 THB per month. 6 respondents or 17% make 30,001 THB to 45,000 THB monthly. 2 respondents or 6% earn less than 15,000 THB, while the other 2 people can earn from 60,001 THB to 75,000 THB a month.

(4) Occupations: Corporate workers still dominate the segment, countable for 19 people or 53% of the segment. 11 respondents or 31% are government employees. 3 people or 8% are self-employed, while 2 people or 6% are students. Only 1 respondent (3%) is a business owner.

(5) Type of accommodations: There is an equal distribution between house residents and condominium residents, each countable for 18 respondents or 50%.

(6) Key influential attributes of online grocery shopping: This segment is influenced to use online grocery shopping because of factors related to details of products and promotions. These are range of products, qualities of products, reasonable delivery fees and attractive promotions.

(7) Online grocery purchasing frequency: Half of this segment(18 respondents) have never purchased online grocery before. 13 respondents or 36% have been e-shopping once a month, while 5 people or 14% claim to have shopped groceries online 2-3 times per month.

(8) Spending per time: Bearing in mind that 50% of this segment are non-shopper of online grocery retails, 12 respondents or 33%, who are considered the majority of product-oriented grocery e-shoppers, generally spend 501 to 1,000 THB per time. 3 respondents or 8% are said to spend less than 500 THB in each shopping. Other three persons, each spend 1,001 to 1,500 THB per time, 1,501 to 2,000 THB per time, and 2,001 THB or above per time, respectively. Each is accountable for 3% of the segment.

(9) Top-five most frequently purchased products (in order of frequency): personal cares, paper products, beverages, bakery, fruit and vegetables.

4.2.2.3 Cluster and demographic association: According to cluster analysis, non-rejectors are divided into two segments: service-oriented and product-oriented. Despite their obviously different directions of preference, the demographic profiles of both segments are very similar. To further explore association between the clusters and the demographic profiles, Chi-Square test has been adopted to further investigate indications of genders, ages, monthly income, occupations and types of accommodation. The test result proves that there is no association between segments and their genders, ages, occupations and types of accommodation. Nevertheless, the test points out the relationship between the segments and the monthly income ranges. Referring to the frequency table in Appendix E, the majority of service-oriented segment has higher income than the majority of product-oriented segment.

4.2.3 Triggers leading to the adoption of online grocery shopping

4.2.3.1 Triggers that encourage first-timers: According to data analyzed from the in-depth interviews, there are five main factors, considered to usually trigger someone to shop grocery online for the first time. The five factors are listed in Table 4.1 below.

Table 4.1: Frequency analysis of the triggers that encourage first-timers, separated by segment.

Trigger to the first adoption	Service-oriented		Product-oriented	
	Frequency	%	Frequency	%
Advertisement	19	11%	17	20%
Recommendation from family, friends, or colleagues.	54	31%	21	25%
Recommendation from store employee	28	16%	7	8%
Review from social medias	33	19%	19	23%
Promotional campaign	39	23%	20	24%

From the Table 4.1, recommendation from family, friends or colleagues is the most convincing trigger to both service-oriented and product-oriented consumers, accounted for 31% and 25% respectively. Moreover, both segments are equally convinced by promotional campaigns and social media reviews.

4.2.3.2 Triggers that encourage return customers: The qualitative exploratory research shows that there are various elements that can influence someone to be a return customer for online grocery shopping. These elements are, for instance, point redemption, good first-time experience, and special occasion discount coupons, etc. Several rather intangible features and experiences can be grouped down into five categories, namely, (1) satisfaction of the first-time service, (2) features for convenience, such as on-time delivery and fast-processing web system, (3) economic benefits, such as special discounts and free delivery service, (4) informative provisions, such as history of purchases and list of frequently bought products, and (5) loyalty programs, such as point redemption and discount on birthday. In order to find level of influence of each categories of factors, respondents were asked in the questionnaire to rate the level of influence, using the five-point Likert scale.

Oneway ANOVA analysis has been applied in order to compare the mean score among these five categories of factors. The result shows that there is a significant difference of mean scores among factors. The mean of informative provisions at 3.9828 is the lowest and is statistically distant from other categories. The mean of the satisfaction of first-time service at 4.6783 is the highest among five categories of factors. It is quite distant from the mean of loyalty programs (4.3684), nonetheless, rather grouped up with the means of features for convenience (4.4912) and economic benefits (4.5259).

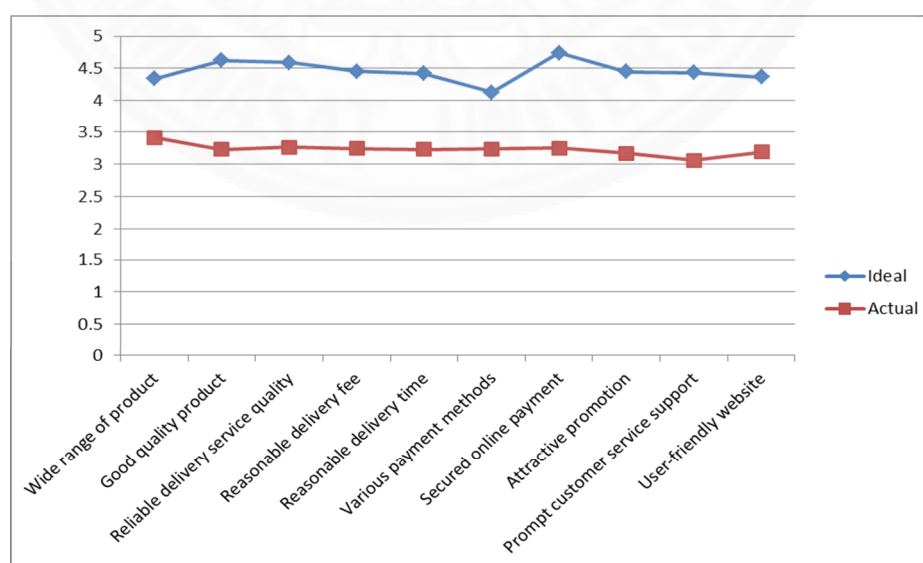
Table 4.2: Summary of influential factors for decision to shop groceries online again

Criteria	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
Satisfaction of the first-time service	0%	2%	2%	23%	73%	4.6783
Features for convenience	0%	0%	3%	46%	52%	4.4912
Economic benefit	0%	0%	3%	41%	56%	4.5259
Informative provisions	0%	9%	18%	40%	34%	3.9828
Loyalty program	0%	0%	14%	35%	51%	4.3684

4.2.4 Barriers against utilization of online grocery shopping:

4.2.4.1 Comparison between ideal and actual online grocery shopping attributes: Respondents were asked to rate the levels of importance of the service attributes that have impact on adopting decision of general online grocery shopping. This part reveals customer's expectation or 'ideal' of online grocery shopping. The same group of respondents was asked to rate all the same attributes of online grocery shopping services from their own experience in order to see where the actual performance of online grocery shopping operators in Thailand are standing in the steps toward being the ideal online grocery retailers. The mean score of each attribute for ideal service attributes and actual service attributes were plotted for comparison in Figure 4.2. The figure displays the ten ideal attributes, with their top-five, ranging from secured online payment (Mean=4.7373), good quality products (Mean=4.6250), reliable delivery service quality (Mean=4.5917), reasonable delivery fee (Mean=4.4583) and attractive promotions (Mean=4.4500). Whereas, the top-five mean scores of actual attributes are wide range of products (Mean=3.4103), reliable delivery service (Mean=3.2627), secured online payment (Mean=3.2456), reasonable delivery fee (Mean=3.2435) and various payment methods (Mean= 3.2368).

Figure 4.2: Comparison of ideal online grocery attributes and actual online grocery attributes



When comparing ideal service attributes with actual service attributes by using t-test analysis, the researcher discovers that there is a wide statistic gap in all attributes which connotes that the satisfaction of current services is still much lower than the customer's expectation of what online grocery retailers should be able to deliver.

Table 4.3: Summary of ideal attribute evaluation of online grocery shopping

Attributes	Unimportant	Of little important	Moderately important	Important	Very important	Mean
Wide range of product	0%	1%	12%	40%	48%	4.3417
Good quality product	0%	0%	3%	33%	65%	4.6250
Reliable delivery service quality	0%	0%	5%	31%	64%	4.5917
Reasonable delivery fee	0%	0%	6%	43%	52%	4.4583
Reasonable delivery time	0%	0%	11%	36%	53%	4.4237
Various payment methods	0%	3%	17%	43%	37%	4.1333
Secured online payment	0%	0%	5%	16%	79%	4.7373
Attractive promotion	0%	0%	6%	43%	51%	4.4500
Prompt customer service support	0%	0%	10%	37%	53%	4.4333
User-friendly website	0%	0%	10%	43%	47%	4.3667

Table 4.4: Summary of actual attribute evaluation of online grocery shopping

Attributes	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Mean
Wide range of product	3%	7%	49%	31%	11%	3.4103
Good quality product	3%	6%	63%	22%	6%	3.2261
Reliable delivery service quality	3%	11%	51%	29%	7%	3.2627
Reasonable delivery fee	3%	10%	53%	28%	6%	3.2435
Reasonable delivery time	3%	7%	59%	28%	4%	3.2281
Various payment methods	3%	4%	61%	30%	2%	3.2368
Secured online payment	3%	8%	58%	25%	6%	3.2456
Attractive promotion	3%	15%	54%	21%	8%	3.1667
Prompt customer service support	3%	17%	57%	19%	4%	3.0614
User-friendly website	3%	11%	59%	22%	6%	3.1842

4.2.4.2 Reasons for rejection: In order to improve online grocery shopping, the reasons of rejection need to be made known and barriers of customer adoption need to be identified. In quantitative research, rejectors were asked to select one or more reasons of their rejection. According to the questionnaire analysis, the major reasons are consumer's behavior, and psychological demands. The issue of consumer's behaviors regards mainly their preference to physically select products by themselves. 61 people or 26% of the respondents have identified such hands-on requirement as their main reason for rejection. The second-ranked reason is the concern about online payment security, countable for 47 votes or 20%. Service quality is the third reason for rejection with 36 responses or 15%. And the fourth rank is satisfaction of recreational moment during shopping, subject to 32 votes or 13%.

Table 4.5: Frequency analysis of the reasons of rejection to adopt online grocery shopping

Reasons for rejection	Frequency	%
Prefer to select physical goods by oneself	61	26%
Do not trust online payment security	47	20%
Worried about service quality	36	15%
Want to enjoy moment during shopping	32	13%
Too complicated online grocery shopping websites	22	9%
Not familiar with internet shopping	13	5%
Delivery fee is too expensive	12	5%
Do not know this kind of service	11	5%
Do not own credit card to purchase	5	2%



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Segmentation: Analyzing segmentation of online grocery shoppers in Thailand using online grocery shopping attributes, the research proposes two segments of customers: service-oriented and product-oriented.

The service-oriented customers show high preference in attributes related services, which include reliability of service providers, reasonable delivery time, variety of payment options, secured online payment procedures, customer service supports and user-friendly web or application interfaces. This segment is accounted for 70% of respondents who are non-rejectors.

The product-oriented customers are those who put importance to attributes related to products and promotions. These are wide range of products, product quality, reasonable delivery fees and attractive promotions. This segment is subject for 30% of non-rejectors.

Looking into the demographic profiles of both segments, the research has found that there is no major statistic difference in terms of genders, ages, occupations and types of accommodation between the two segments. There is only the data monthly income ranges that indicates comparative statistical difference. From quantitative descriptive research further reveals that the service-oriented customers tend to have higher income than the product-oriented customers.

5.2 Key triggers that increase online grocery adoption rate: The analysis of the triggers is carried out to explore two types of triggers: those that encourage first-timers and those that persuade return customers. Top-three triggers for grocery e-shopping first-timers, for both service-oriented and product-oriented segments, are (1) recommendation from family, friends or colleagues, (2) promotional campaigns and (3) reviews from social media.

That said, the hypermarket businesses may consider designing their marketing strategies that bear effects to these triggers, in order to increase their opportunities to attract the customers to try internet shopping for groceries.

Five key categories of factors are identified as contributing to someone deciding to be a return customer for online grocery shopping. These five key factors are (1) satisfaction of the first-time service, (2) features for convenience, (3) economic benefits, (4) informative provisions and (5) loyalty programs. Comparing the means of these factors, the researcher ranks the scores from highest to lowest as follows: satisfaction of the first-time service, (Mean=4.6783), economic benefits (Mean=4.5259), features for convenience (Mean=4.4912), loyalty programs (Mean=4.3684) and informative provisions (Mean=3.9828). However, according to result of Oneway ANOVA test, there is no statistically significant difference either between satisfaction of the first-time service, features for convenience and economic benefits, or between features for convenience and economic benefits and loyalty programs. Therefore, it can only be concluded that informative provisions has the least influence for return customers, and the influence of satisfaction from the first-time service is significantly higher than that of loyalty programs and informative provisions.

From the above findings, it is suggested that hypermarket businesses in Thailand can ensure the number of return customers by delivering striking first-time experience. Constant observation and improvement of their current services should be carried out to tackle arising problems that can lead to unsatisfying new customer's feedbacks.

5.3 Key barriers against online grocery shopping: In finding the barriers, the research has set two sub-objectives to achieve: to evaluate the actual service attributes compared with the ideal service attributes of current online grocery shopping service in Thailand, and to identify reasons for rejection of online grocery shopping in Thailand.

In the comparative analysis of actual and ideal attributes, the research result shows that there is a considerable gap between ideal online grocery shopping experience and actual performance of online grocery retailers nowadays in all attributes listed. These attributes are (1) wide range of products, (2) good product quality, (3) reliable delivery

service, (4) reasonable delivery service fee, (5) reasonable delivery time, (6) various payment options, (7) secured online payment procedures, (8) attractive promotions, (9) prompt customer service support and (10) user-friendly websites or applications. Five attributes with the greatest difference of mean scores between ideal and actual attributes are (1) secured online payment, (2) good quality products, (3) prompt customer service support, (4) reliable delivery service quality and (5) attractive promotions. It is advisable, within the restriction of this research, that the hypermarketeters consider prioritizing these five attributes when planning to launch their marketing campaigns for their online stores. This is to increase the opportunities to go over barriers that might be set between them and their target customers.

The research has also pointed out three main reasons for rejection of online grocery shops. These are (1) the customer's preference to physically select goods by themselves, (2) concern of online payment security and (3) perceived satisfaction of recreational moment during their grocery shopping. These are issues related to the current consumer's behaviors, which stay beyond any kind of rationale. Nonetheless, it could well be an interesting challenge for the hypermarketeters to seek for ways to create brand image their online grocery stores as a complementary option to those psychological preferences. Tangible benefits can be offered, such as guarantee of same product quality for both online and in-store shopping, proofs of online payment security and attractive edgy web and application interface designs that put forward enjoyable virtual experience in shopping for the customers.

REFERENCES

- Aaker, D., Kumar, V., Leone, R., & Day, G. (2013). *Marketing research*. Hoboken, NJ: Wiley.
- A Fresh Look at Online Grocery - Consumer Products & Retail Featured Article - A.T. Kearney - A.T. Kearney. (2016). Atkearney.com., Retrieved 10 December 2015, from https://www.atkearney.com/consumer-products-retail/ideas-insights/featured-article/-/asset_publisher/KQNW4F0xInID/content/a-fresh-look-at-online-grocery/10192
- Amornvivat, S., Ratanapinyowong, T., Sayamanont, P., & Arakwichanan, N. (2014). Special Scoop: Grocery Store. SCB Economic Intelligence Center (EIC)
- Euromonitor International. (2015, May). Big C Supercenter PCL in retailing (Thailand). Retrieved from Euromonitor Passport database.
- Euromonitor International. (2015, May). Ek-Chai Distribution System Co Ltd in retailing (Thailand) Retrieved from Euromonitor Passport database.
- Euromonitor International. (2015, May). Grocery retailers in Thailand. Retrieved from Euromonitor Passport database.
- Euromonitor International. (2015, May). Internet Retailing in Thailand. Retrieved from Euromonitor Passport database.
- Hand, C., Dall'Olmo Riley, F., Harris, P., Singh, J., & Rettie, R. (2009). Online grocery shopping: the influence of situational factors. *European Journal Of Marketing*, 43(9/10), 1205-1219. doi: 10.1108/03090560910976447

- Hansen, T. (2005). Consumer adoption of online grocery buying: a discriminant analysis. *Intl J Of Retail & Distrib Mgt*, 33(2),101-121. doi: 10.1108/09590550510581449
- Huang, Y., & Oppewal, H. (2006). Why consumers hesitate to shop online. *Intl J Of Retail & Distrib Mgt*, 34(4/5), 334-353. doi:10.1108/09590550610660260
- Koyuncu, C., & Bhattacharya, G. (2004). The impacts of quickness, price, payment risk, and delivery issues on on-line shopping. *The Journal Of Socio-Economics*, 33(2), 241-251. doi: 10.1016/j.socec.2003.12.011
- Liao, S., Chen, Y., & Lin, Y. (2011). Mining customer knowledge to implement online shopping and home delivery for hypermarkets. *Expert Systems With Applications*, 38(4), 3982-3991. doi: 10.1016/j.eswa.2010.09.059
- Mwpvl.com,. (2014). Tesco dotcom UK Business Model. Retrieved from http://www.mwpvl.com/html/tesco_dotcom_uk_business_model_.html
- Raijas, A. (2002). The consumer benefits and problems in the electronic grocery store. *Journal Of Retailing And Consumer Services*, 9(2), 107-113. doi: 10.1016/s0969-6989(01)00024-8
- Ramus, K., & Asger Nielsen, N. (2005). Online grocery retailing: what do consumers think?. *Internet Research*, 15(3), 335-352. doi: 10.1108/10662240510602726
- Rohm, A., & Swaminathan, V. (2004). A typology of online shoppers based on shopping motivations. *Journal Of Business Research*, 57(7), 748-757. doi:10.1016/s0148-2963(02)00351-x



APPENDICES

APPENDIX A

Questionnaire

Dear Participant,

You are invited to participate in a research study titled “A study of opportunities for developing online channel presence for hypermarkets in Thailand”. This study is conducted by students of Master in Marketing Program of Thammasat University. The purpose of this survey is to study customer perception, behavior and adoption process of online grocery shopping.

Your time and kindness to participate in a survey are highly appreciated. Your participation in this study is voluntary and you are free to withdraw your participation from this study at any time. The survey should take around 10 minutes to complete. Please answer each question on the survey as completely and accurately as possible. Your responses will be processed confidentially. The survey collects non identifying information of any respondent and only group data will be made available.

The results of this survey will be used as academic purpose only. By completing and submitting this survey, you are indicating your consent to participate in the study.

If you have any questions regarding the survey, please feel free to contact me as specified below. Thank you for your contribution to this survey and I wish you the best in your future achievement.

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Email address: la.wimonrut@gmail.com

Part A: Screening Questions

1. Have you ever purchased any products via online channels during the last 3 months?
 - Yes
 - No

2. Have you ever purchased grocery products via online channels of the hypermarkets during the last 3 months? (Yes: go to No.4, No: go to No.3)
 - Yes
 - No

3. If you never purchase grocery products via online channels in the hypermarkets during the last 3 months before, are you willing to try? (Yes: go to No.4, No: go to No.15)
 - Yes
 - No

Part B: Main Questions

4. What is your trigger point or what can be your trigger point to adopt online grocery shopping for the first time? (You can choose more than 1 option)
 - Advertisement
 - Recommendation from family, friends, or colleague
 - Recommendation from store employees
 - Review from social medias Promotional campaigns
 - Other (please specify)_____

5. How often do you purchase for general products via online channels?
 - Never
 - 1 time per month
 - 2-3 times per month
 - 4-5 times per month
 - More than 5 times per month

6. How often do you purchase grocery product via online channels?
 - Never
 - 1 time per month
 - 2-3 times per month
 - 4-5 times per month
 - More than 5 times per month

7. How much spending of your general online shopping per time?
- Less than 500 THB
 - 501 - 1,000 THB
 - 1,001 - 1,500 THB
 - 1,500 - 2,000 THB
 - 2,001 THB and above
 - N/A
8. How much spending of your online grocery shopping per time?
- Less than 500 THB
 - 501 - 1,000 THB
 - 1,001 - 1,500 THB
 - 1,500 - 2,000 THB
 - 2,001 THB and above N/A
9. Please select type of product categories you purchase via online channel? (You can choose more than 1 choice.)
- None
 - Beverages
 - Bread/Bakery
 - Canned/Jarred Goods
 - Dairy Frozen
 - Foods
 - Meat
 - Fruits & Vegetables
 - Cleaners
 - Paper Goods
 - Personal Care
 - Products Electronic devices
 - Other (please specify)_____
10. Please select websites or application that you have ever purchased online grocery. (You can choose more than 1 choice)
- Tesco Lotus
 - Big C
 - Tops Super market
 - Other (please specify)_____
11. Please rank your overall satisfaction of using online grocery websites or applications. (5 = the most satisfied, and 1 = the least satisfied) _____

12. Please rate the important level of attributes of online grocery shopping that influence you to adopt.

Attributes	Unimportant	Of little important	Moderately important	Important	Very important
Wide range of product					
Good quality product					
Reliable delivery service quality					
Reasonable delivery fee					
Reasonable delivery time					
Various payment methods					
Secured online payment					
Attractive promotion					
Prompt customer service support					
User-friendly website					

13. Please rate your actual experience of online grocery shopping that you have adopted.

Attributes	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Wide range of product					
Good quality product					
Reliable delivery service quality					
Reasonable delivery fee					
Reasonable delivery time					
Various payment methods					
Secured online payment					
Attractive promotion					
Prompt customer service support					
User-friendly website					

14. To what extent do you agree with the following statement about online grocery shopping.

Criteria	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	N/A
The satisfaction of the first time service will enable me to repeat purchasing.						
The convenient benefits such as on time delivery, fast processing website, and etc will enable me to repeat purchasing						
The economic benefits such as special discount, free delivery service, and etc, will encourage me to repeat purchasing.						
The informative benefits such as receive customized promotion, receive record of my past purchase, and etc, will encourage me to repeat purchasing						
The loyalty program such as point redemption, special discount on birthday, and etc will encourage me to repeat purchasing.						

15. Please specify reasons why you have no interest to adopt online channel of hypermarkets in Thailand? (You can choose more than 1 answer)

(Note: Only rejector can answer this question, non-rejector will be skipped to Part C)

- Prefer to select physical goods by oneself
- Want to enjoy moment during shopping
- Delivery fee is too expensive
- Worried that service quality of goods delivery is not good enough that may affect goods condition
- Do not know this kind of services
- Do not trust online payment security
- Do not own credit card to use for purchasing
- Not familiar with internet shopping
- Website is too complicated to use

Part C: Demographic Questions

16. What is your gender

- Male
- Female

17. What is your age range?

- Below 25 years old
- 26 to 33 years old
- 34 to 41 years old
- 42 to 49 years old
- 50 years old and above

18. What is your monthly income range?

- Below 15,000 THB
- 15,001 - 30,000 THB
- 30,001 - 45,000 THB
- 45,001 - 60,000 THB
- 60,001 - 75,000 THB
- 75,001 and above

19. What is your occupation?

- Student
- Corporate employee
- Government employee
- Self-employed
- Business owner
- Other (please specify)_____

20. What type of your accommodation? (Please select one that you live most often.)

- Home
- Condominium
- Other (please specify) _____

=====End of questionnaire=====

APPENDIX B

Demographic profile of questionnaire respondents

Criteria		Non-Rejector		Rejector	
		Frequency	%	Frequency	%
Gender	Male	44	38%	28	33%
	Female	72	62%	56	67%
Age	Below 25 years old	8	7%	15	18%
	26-33 years old	55	47%	44	52%
	34-41 years old	37	32%	17	20%
	42-49 years old	16	14%	7	8%
	50 years old and above	0	0%	1	1%
Monthly income (THB)	Less than 15,000	2	2%	8	10%
	15,001-30,000	22	19%	28	33%
	30,001-45,000	24	21%	17	20%
	45,001-60,000	36	31%	18	21%
	60,001-75,000	18	16%	7	8%
	75,001 and above	14	12%	6	7%
Occupation	Student	2	2%	8	10%
	Corporate employee	68	59%	55	65%
	Government employee	20	17%	11	13%
	Self-employed	14	12%	9	11%
	Business owner	12	10%	1	1%
Type of accommodations	Home	46	40%	63	75%
	Condominium	70	60%	21	25%

APPENDIX C

Demographic profile of two customer segments

Criteria		Service-oriented		Product-oriented	
		Frequency	%	Frequency	%
Gender	Male	32	40%	12	33%
	Female	48	60%	24	67%
Age	Below 25 years old	6	8%	2	6%
	26-33 years old	34	43%	21	58%
	34-41 years old	30	38%	7	19%
	42-49 years old	10	13%	6	17%
	50 years old and above	0	0%	0	0%
Monthly income (THB)	Less than 15,000	0	0%	2	6%
	15,001-30,000	12	15%	10	28%
	30,001-45,000	18	23%	6	17%
	45,001-60,000	20	25%	16	44%
	60,001-75,000	16	20%	2	6%
	75,001 and above	14	18%	0	0%
Occupation	Student	0	0%	2	6%
	Corporate employee	49	61%	19	53%
	Government employee	9	11%	11	31%
	Self-employed	11	14%	3	8%
	Business owner	11	14%	1	3%
Type of accommodations	Home	28	35%	18	50%
	Condominium	52	65%	18	50%

APPENDIX D

Behavior analysis of two customer segments

Behavior Analysis		Service-oriented		Product-oriented	
		Frequency	%	Frequency	%
Frequency of general online purchasing	Never	2	3%	2	6%
	1 time per month	18	23%	13	36%
	2-3 times per month	46	58%	17	47%
	4-5 times per month	13	16%	-	0%
	More than 5 times per month	1	1%	4	11%
Frequency of general online grocery purchasing	Never	32	40%	18	50%
	1 time per month	28	35%	13	36%
	2-3 times per month	20	25%	5	14%
Spending of general online purchasing (THB)	less than 500	8	10%	2	6%
	501-1,000	27	34%	13	36%
	1,001-1,500	31	39%	13	36%
	1,501-2,000	12	15%	-	0%
	2,001 and above	-	0%	8	22%
	N/A	2	3%	-	0%
Spending of general online grocery purchasing (THB)	less than 500	8	10%	3	8%
	501-1,000	33	41%	12	33%
	1,001-1,500	1	1%	1	3%
	1,501-2,000	5	6%	1	3%
	2,001 and above	1	1%	1	3%
	N/A	32	40%	18	50%
Type of product purchased	Beverages	28	13%	9	9%
	Bakery	5	2%	9	9%
	Canned	20	9%	5	5%
	Dairy	8	4%	5	5%
	Frozen	7	3%	5	5%
	Meat	12	5%	5	5%
	Fruit	9	4%	7	7%
	Cleaner	32	14%	6	6%
	Paper goods	28	13%	13	13%
	Personal cares	32	14%	19	19%
	Electronic	11	5%	4	4%
	Clothes	6	3%	1	1%
	None	26	12%	13	13%

APPENDIX E

Chi-Square test results

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
TwoStep Cluster Number * 16_What is your gender	116	58.0%	84	42.0%	200	100.0%
TwoStep Cluster Number * 17_What is your age?	116	58.0%	84	42.0%	200	100.0%
TwoStep Cluster Number * 18_What is your monthly income?	116	58.0%	84	42.0%	200	100.0%
TwoStep Cluster Number * 19_What is your occupation?	116	58.0%	84	42.0%	200	100.0%
TwoStep Cluster Number * 20_What type of your accommodation?	116	58.0%	84	42.0%	200	100.0%

TwoStep Cluster Number * 16_What is your gender

Crosstab

Count

	Count	16_What is your		Total
		Male	Female	
TwoStep Cluster Number	1	32	48	80
	2	12	24	36
Total		44	72	116

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.469 ^a	1	.494		
Continuity Correction ^b	.228	1	.633		
Likelihood Ratio	.473	1	.491		
Fisher's Exact Test				.540	.318
Linear-by-Linear Association	.465	1	.495		
N of Valid Cases	116				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.66.

b. Computed only for a 2x2 table

TwoStep Cluster Number * 17_What is your age?**Crosstab**

Count		17_What is your age?				Total
		Below 25 years old	26-33 years old	34-41 years old	42-49 years old	
TwoStep Cluster Number	1	6	34	30	10	80
	2	2	21	7	6	36
Total		8	55	37	16	116

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	4.299 ^a	3	.231
Likelihood Ratio	4.490	3	.213
Linear-by-Linear Association	.225	1	.636
N of Valid Cases	116		

a. 2 cells (25.0%) have expected count less than 5. The minimum

TwoStep Cluster Number * 18_What is your monthly income?**Crosstab**

Count		18_What is your monthly income?					
		<150000	15001- 30000	30001- 45000	45001- 60000	60001- 75000	>75001
TwoStep Cluster Number	1	0	12	18	20	16	14
	2	2	10	6	16	2	0
Total		2	22	24	36	18	14

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	19.653 ^a	5	.001
Likelihood Ratio	24.368	5	.000
Linear-by-Linear Association	10.665	1	.001
N of Valid Cases	116		

a. 3 cells (25.0%) have expected count less than 5. The minimum

TwoStep Cluster Number * 19_What is your occupation?**Crosstab**

Count		19_What is your occupation?					Total
		student	corporate employee	government employee	self-employed	business owner	
TwoStep Cluster Number	1	0	49	9	11	11	80
	2	2	19	11	3	1	36
Total		2	68	20	14	12	116

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.608 ^a	4	.009
Likelihood Ratio	14.171	4	.007
Linear-by-Linear Association	2.007	1	.157
N of Valid Cases	116		

a. 4 cells (40.0%) have expected count less than 5. The minimum

TwoStep Cluster Number * 20_What type of your accommodation?**Crosstab**

Count		20_What type of		Total
		home	condo or apartment	
TwoStep Cluster Number	1	28	52	80
	2	18	18	36
Total		46	70	116

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.334 ^a	1	.127		
Continuity Correction ^b	1.750	1	.186		
Likelihood Ratio	2.311	1	.129		
Fisher's Exact Test				.153	.093
Linear-by-Linear Association	2.314	1	.128		
N of Valid Cases	116				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.28.

b. Computed only for a 2x2 table

APPENDIX F

Oneway ANOVA Test results

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence		Minimum	Maximum
					Lower Bound	Upper Bound		
First time experience	116	4.6783	.60041	.05599	4.5673	4.7892	2.00	5.00
Convenient	116	4.4912	.55248	.05174	4.3887	4.5937	3.00	5.00
Economic	116	4.5259	.56663	.05261	4.4217	4.6301	3.00	5.00
Informative	116	3.9828	.93234	.08657	3.8113	4.1542	2.00	5.00
Loyalty	116	4.3684	.71967	.06740	4.2349	4.5020	3.00	5.00
Total	580	4.4087	.72650	.03030	4.3492	4.4682	2.00	5.00

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31.955	4	7.989	16.803	.000
Within Groups	271.001	575	.475		
Total	302.957	579			

Post Hoc Tests

Multiple Comparisons

(I) factor		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence	
					Lower Bound	Upper Bound
First time experience	Convenient	.18703	.09113	.243	-.0623	.4364
	Economic	.15240	.09074	.447	-.0959	.4007
	Informative	.69550*	.09074	.000	.4472	.9438
	Loyalty	.30984*	.09113	.006	.0605	.5592
Convenient	First time	-.18703	.09113	.243	-.4364	.0623
	Economic	-.03463	.09093	.996	-.2835	.2142
	Informative	.50847*	.09093	.000	.2596	.7573
	Loyalty	.12281	.09133	.663	-.1271	.3727
Economic	First time	-.15240	.09074	.447	-.4007	.0959
	Convenient	.03463	.09093	.996	-.2142	.2835
	Informative	.54310*	.09054	.000	.2953	.7909
	Loyalty	.15744	.09093	.415	-.0914	.4063
Informative	First time	-.69550*	.09074	.000	-.9438	-.4472
	Convenient	-.50847*	.09093	.000	-.7573	-.2596
	Economic	-.54310*	.09054	.000	-.7909	-.2953
	Loyalty	-.38566*	.09093	.000	-.6345	-.1368
Loyalty	First time	-.30984*	.09113	.006	-.5592	-.0605
	Convenient	-.12281	.09133	.663	-.3727	.1271
	Economic	-.15744	.09093	.415	-.4063	.0914
	Informative	.38566*	.09093	.000	.1368	.6345

APPENDIX G

t-test result

Group Statistics

compare		N	Mean	Std. Deviation	Std. Error Mean
Wide range of product	Actual	116	3.4103	.87251	.08066
	Ideal	116	4.3417	.71592	.06535
Good quality product	Actual	116	3.2261	.76159	.07102
	Ideal	116	4.6250	.53550	.04888
Reliable delivery service quality	Actual	116	3.2627	.84153	.07747
	Ideal	116	4.5917	.58691	.05358
Reasonable delivery fee	Actual	116	3.2435	.82282	.07673
	Ideal	116	4.4583	.60663	.05538
Reasonable delivery time	Actual	116	3.2281	.74114	.06941
	Ideal	116	4.4237	.68446	.06301
Various payment methods	Actual	116	3.2368	.68230	.06390
	Ideal	116	4.1333	.80891	.07384
Secured online payment	Actual	116	3.2456	.79335	.07430
	Ideal	116	4.7373	.54581	.05025
Attractive promotion	Actual	116	3.1667	.87154	.08163
	Ideal	116	4.4500	.60599	.05532
Prompt customer service support	Actual	116	3.0614	.80138	.07506
	Ideal	116	4.4333	.67030	.06119
User-friendly website	Actual	116	3.1842	.80448	.07535
	Ideal	116	4.3667	.66019	.06027

Independent Samples Test

		Levene's Test for		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence	
									Lower	Upper
Wide range of product	Equal variances assumed	2.709	.101	-8.994	230	.000	-.93141	.10356	-1.13543	-.72739
Good quality product	Equal variances assumed	1.575	.211	-16.343	230	.000	-1.39891	.08560	-1.56755	-1.23027
Reliable delivery service quality	Equal variances assumed	6.627	.011	-14.150	230	.000	-1.32895	.09392	-1.51398	-1.14393
Reasonable delivery fee	Equal variances assumed	2.086	.150	-12.920	230	.000	-1.21486	.09403	-1.40011	-1.02960
Reasonable delivery time	Equal variances assumed	1.205	.273	-12.772	230	.000	-1.19566	.09362	-1.38012	-1.01120
Various payment methods	Equal variances assumed	3.695	.056	-9.140	230	.000	-.89649	.09808	-1.08973	-.70325
Secured online payment	Equal variances assumed	10.204	.002	-16.733	230	.000	-1.49167	.08914	-1.66732	-1.31603
Attractive promotion	Equal variances assumed	1.975	.161	-13.132	230	.000	-1.28333	.09773	-1.47588	-1.09079
Prompt customer service support	Equal variances assumed	1.414	.236	-14.232	230	.000	-1.37193	.09640	-1.56186	-1.18200
User-friendly website	Equal variances assumed	.032	.857	-12.317	230	.000	-1.18246	.09600	-1.37160	-.99331

BIOGRAPHY

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