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A Model of Thai Consumers' Decision Making in the Age of Multichannel Retailing

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ABSTRACT

The purpose of this study is to develop a structural model of factors affecting the decisions of Thai consumers to buy goods in store-based retailers, such as shopping malls, and Internet-based retailers, such as Amazon.com. In the age of digitalization, traditional or store-based retailers cannot ignore Internet-based retailing, and more marketing budgets are allocated for advertising and promotion for their products to Internet users. In spite of the increasing use of the Internet and online sales, very little research has been conducted to study consumer behavior in the multichannel retailing that includes both store-based and Internet-based retailing in Thailand. This study is probably the first empirical research to investigate multichannel retailing in Thailand. Based on relevant past research, this research fills this gap by developing a structural model to investigate and test hypotheses developed for this study. The samples were Thai people who used to make online purchases on the Internet and buy goods in the store-based retailers in the past year. The research instruments used to collect primary data were self-reported questionnaires. The collected data are being tested for reliability and validity using confirmatory factor analysis (CFA), and the structural model and hypotheses will be tested and examined by structural equation modeling (SEM). SEM is a set of advanced statistical techniques to examine multiple regression models simultaneously in business and marketing studies. The collected data in the questionnaires will be processed with SPSS 21 and AMOS 21.

Key words: Consumer decision making, Multichannel retailing, Store-based retailers, Internet-based retailers, Structural equation modeling

1. INTRODUCTION

As pointed by Levy, Weitz and Grewal (2019), retailing is such a common part of consumers' everyday lives that people often take it for granted. Retailers are part of the marketing channels. For most people, retailers are places to buy things that they want. Both young and older people go to retailers to find and buy products. These retailers are located near consumers' houses. In the digital age, people also search for and buy the products they like on websites or Internet-based retailers, such as Amazon, Lazada. Retailers are needed because they create value by providing an assortment of products and services, sorting and holding inventory, and providing services.

In the second decade of the twenty-first century, we can still find traditional marketing channels or bricks-and-mortar stores and most of the retail sales are derived from these stores, more and more Internet-based stores are emerging and gaining more sales volume every year. Customers now expect more and better marketing channel choices for easy and convenient access to products and services they want when it is convenient for them to buy (Watson, Worm, Palmatier & Ganesan, 2015).

Even though many consumers search and purchase their products on Internet-based retailers or on mobile devices such as smartphones and tablets, more than 90 percent of all retail sales are made in store-based retailers that are located near consumers' houses,

apartments, or workplaces. Thus, retail stores compete against other stores nearby (Levy, Wetz & Grewal, 2019).

There has been a dramatic change in the structure of the retail industry over the past 50 years in Thailand. More department stores, supercenter stores and convenience stores have been built and open in Bangkok and major cities. Moreover, more Thai consumers, especially the generation Y (those consumers aged between 20-34 years old) shop for goods on the Internet or Internet-based retailers every year, on their mobile devices and desk-top computers (Panjakajornsak, 2017). However, in spite of the popularity and networks of the store-based retailers and increased presence of Internet-based retailers in Thailand, no empirical research studying shopper behavior in both types of retailers in the same study are relatively scarce. This study helps to fill this gap by examining the antecedents and mediating factors that affect Thai consumers' decision making to buy goods in both store-based and Internet-based retailers simultaneously in the same model.

The success of a retailer depends on how well a firm identifies and understand its customers and how well it forms a strategy mix to appeal to them. This includes the identification of consumer characteristics, needs, and attitudes; learning how consumers make decisions; and then formulating a proper target-market plan. Today's consumers are more empowered than ever before. They have several options with regard to when they shop, where they shop, and how they go about shopping. Under these circumstances, consumers now have higher expectations about retailers with which they do business (Berman, Evans & Chatterjee, 2018).

The purpose of the study is to develop a structural model to examine the relationships and effects of factors affecting the decision making of Thai consumers to buy products in store-based retailers and Internet-based retailers. More specifically, it will examine the effects of retail mix, the service environment, customer experience, customer value, relationship quality, and consumer decision making.

This study is divided into five parts. The first part is an introduction, followed by the literature review on marketing channels, retail marketing, multichannel retailing, stimulus-organism-performance (S-O-P theory), relevant research, and model and hypotheses development. The third part is the methodology, including the population and samples, measures, data collection, and statistical analysis. The fourth part is the findings and discussion. The final part is the conclusion of the study.

2. LITERATURE REVIEW

2.1 Retailing in Thailand

According to Feeny, Vongpatanasin and Soonsatham (1996), traditional Thai retailers take the form of shop-houses and are mostly family businesses selling all sorts of products needed for everyday use, such as groceries, garments, building materials. Shop-houses are spread around communities in Thailand. The first modernized retailers in Thailand emerged nearly 50 years ago when the first department store was open in 1956, Central Department Store, in Bangkok's Chinatown. In the next decade, foreign department stores (Thai Daimaru, Yaohan, Isetan, Sogo) were operated in Bangkok, the capital of Thailand. Over the following two decades, department stores had the biggest impact on how Thai consumers shop. More department stores have been added in Bangkok and other big cities. With the booming economy of Thailand in the late 1980s, both convenience stores and discount superstores. With the arrival of 7-Eleven convenience stores in 1989, the competition of retailing in Thailand has increased. In only six years, the network of 7-Eleven stores had grown to over 500 stores. As of now, its network has increased to over 9,000 stores throughout Thailand. The rising income and changing lifestyles of people in the provinces have stimulated the establishment of modern department stores, superstores, and convenience stores in all major cities around the country.

The Boston Consulting Group conducted a survey of 4,000 Thai consumers aged 20 or older in all income classes and evenly split between men and women, and found that there are

five major trends that are shaping Thai consumers: strong growth in categories that offer indulgences and experiences, brand loyalty, substantial buying power in women, a social media model driving e-commerce, and increased importance of convenience stores (Bharadwaj, Chaudhary, Kittikachorn, & Rastogi, 1996).

Further, in a study of retailers in 12 countries by Euromonitor International (2016), it reported that the retailing business continues to evolve quickly on a global scale. Shopper demand for more convenient and faster services at any time through any channel and device continues, retailers around the world are finding new ways and services to meet them. For example, Siam Discovery the Exploratorium is a hybrid of a department store and a shopping mall located in central Bangkok, Thailand. The Exploratorium offers more than 5,000 lifestyle brands under one single concept that puts customers at the center. Rather than classifying products by brands like a department store, the Exploratorium categorizes products by lifestyles design around a laboratory theme with seven labs. Shoppers are encouraged to visit and conduct their own experiments through testing, creating, and cultivating something for themselves (Euromonitor International, 2016).

2.2. Marketing Channels

A marketing channel or a channel of distribution refers to *a set of interdependent organizations involved in the process of making a product or service available for use or consumption* (Palmatier, Stern & El-Ansary, 2015; Berman, Evans & Chatterjee, 2018). Palmatier, Stern and El-Ansary (2015) identify three key entities involved in every marketing channel: manufacturers, intermediaries (wholesale, retail, and specialized), and end-users (business customers or consumers). The term *intermediary* refers to any channel member other than the manufacturer or the end-user. There are three general types of intermediaries: wholesale, retail, and specialized. Wholesalers include merchant wholesalers or distributors, manufacturers' representatives, agents, and brokers. A wholesaler sells to other channel intermediaries, such as retailers, but not to individual consumers. Retail intermediaries come in many forms: department stores, mass merchandisers, hypermarkets, specialty stores, category killers, convenience stores, warehouse clubs, online retailers. Specialized intermediaries are involved in the channel to perform a specific function, such as financing, insurance, and credit card companies, logistics and shipping firms, information technology firms. In this study, the target population and samples include customers of store-based retailers and Internet-based retailers in the so-called multichannel retailing.

2.3 Retailing and retail marketing

Retailing is defined by Levy, Wetz and Grewal (2018) as *the set of business activities that adds value to products and services sold to consumers for their personal or family use*. While Dunne and Lusch (2008) define retailing as *the final activities and steps needed to place a product made elsewhere to consumers*. In addition, a retailer is a business that sells products and/or services to consumers for their personal or family use. Retailers usually buy products from wholesalers and/or manufacturers and resell them to consumers. Therefore, any firm that sells a product or provides a service to the final consumer is performing a retailing function, regardless of whether the firm sells to the consumer in a store, over the phone, through the Internet, door to door, or through vending machines, that firm is involved in retailing (Dunne & Lusch, 2008). Retailers are a key component in a supply chain that links manufacturers to consumers. A supply chain is a set of firms that make and deliver goods and services to consumers. Figure 1 shows a retailer's position within a supply chain.

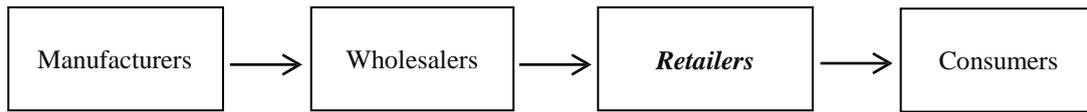


Figure 1: A typical supply chain

In Figure 1, it shows that retailers are the last member of a supply chain that are in contact with and sells products to final consumers. Manufacturers or brand owners make products and sell them to wholesalers, who resell them to retailers. Therefore, retailers are the contact points to the final consumers who buy goods for personal or family use and consumption. A retail channel defines the way a retailer sells and delivers merchandise and services to its customers. The most common channel used by retailers is stores, but today's retailers also use a variety of nonstore channels, including the Internet, mobile, social media, and catalogs (Levy, Weitz and Grewal, 2019).

The first job for retailers is to collect an assortment from various sources, buy in large quantity, and sell in small amounts. The second job is to communicate with customers, manufacturers, and wholesalers. Shoppers learn about the availability and characteristics of goods and services from retailer ads, salespeople, and displays in the stores. Retailers also complete transactions with customers, meaning that they have convenient locations, filling orders, and processing credit purchases. To compete with Internet-based retailers, many firms now engage in omnichannel retailing, whereby retailers sell to consumers through multiple retail formats. Most large retailers operate both physical stores and websites to respond to demanding customers and the consumers' changing lifestyles (Berman, Evans & Chatterjee, 2018).

2.4 Internet-based retailers

Shopping online on mobile and digital devices on smartphones, tablets, notebooks, desktop computers has become increasingly common during the last several years. While such mobile commerce or m-commerce is still in its infancy, this electronic marketing channel is expected to grow quickly as consumers become more familiar with these electronic devices. These electronic marketing channels are defined as *the use of the Internet to make products and services available so that the target market with access to computers are other enabling devices can shop and complete the transaction for purchase via interactive electronic means* (Watson et al., 2015). Online shopping via electronic marketing channels on the Internet has grown dramatically from about \$25 billion in annual sales in the early 2000s to over \$175 billion by 2010 and to \$279 billion in 2015 (Rosenbloom, 2013).

The customer value proposition of the store-based retailers is convenience, product availability, choice and comparison, touch and feel, trial, advice, confidence through physical presence. Today's consumer is increasingly informed and demanding, and is influenced in store and shopping choices by factors beyond traditional advertising and promotions. With time-poor consumers looking for value from every interaction, and with almost unlimited product assortments available on the Internet, store-based retailers are now opening in multiple formats (Dent & White, 2018). Market access channels now include an array of virtual channels, such as apps, websites, mobile access devices, social media in all forms, as well as real store-based retailers.

2.5 Multichannel retailing

The concept of multichannel retailing is a relatively new one. A textbook on retailing by Dunne and Lusch in 2008 did not mention anything about multichannel retailing, not to mention omnichannel retailing. Today, consumers are more comfortable with buying through multiple channels and types of outlets, such that their purchase behavior varies by segment and purchase occasion. Some consumers like to shop in the bricks-and-mortar stores (store-based retailers) for some goods, while also browse through websites of retailers to

search for and buy some goods. All big store-based retailers now have their own websites to sell products online. This broad array of shopping behavior means that designing a retail strategy needs to take into account the entire process the consumer go through before making purchase decisions and revisits to the stores in the future (Palmatier, Stern & El-Ansary, 2015).

At the beginning, a retailer often operates single-channel retailing, whereby it sells to customers through one retail format, which may be store-based or non-store-based (direct selling, vending machines, web retailing). As the firm grows, it may operate multichannel retailing, whereby it sells to consumers through multiple retail formats. When the firm is ready to improve its customer experiences, the firm switch to omnichannel retailing to deliver a consistent and uninterrupted customer experiences. Berman, Evans and Chatterjee (2018) point out the differences between multichannel retailing and omnichannel retailing that, for a multichannel retailers, there is no integration or coordination among the separate channels or devices. Omnichannel retailers, on the other hand, focuses on consumers' use of multiple devices and channels throughout the consumers' retail journey to a single purchase. The current study focuses on the multichannel retailing as the retailers in Thailand have not adopted the concept of omnichannel retailing as in developed markets.

According to Verhoef, Kannan and Inman (2015), retailing has changed dramatically in the last two decades because of the online channel and digitalization. In retail markets, the online channel has become dominant and can be considered a disruptive development. To respond to these developments, many retailers have used multi-channel strategies. These strategies first involved the decision as to whether to add new channels to existing channel mix. Three major research streams on multi-channel retailing can be found: impact of channels on performance, shopping behavior across channels, and retail mix across channels (Verhoef et al., 2015). The current study is a mix of the three streams in that it focuses on shopper behavior and retail mix on channel performance.

Today retailers go to market through many channels or portals, including stores, catalogs, mail orders, the Internet and telesales. Consumers now expect to switch from one channel to another as they browse, consider, choose, buy, receive, consume and dispose of their products or services. Retailers who started out as web-based only, such as Amazon, have introduced physical stores into their channel mix (Dent & White, 2018). Multichannel retailing is when retailers offer more than one channel to sell and deliver merchandise and services to customers. Channels operate without integrating operations between them. According to Levy, Weitz and Grewel (2019), this form of multichannel retailing started when Sears opened its first store in 1935, 33 years after it launched its catalog to the American consumers. Now, almost all large retailers that operate stores are multichannel retailers, with physical stores, an Internet channel that offers their customers opportunities to buy products or services by accessing their websites. Figure 2 shows examples of multichannel retailing.

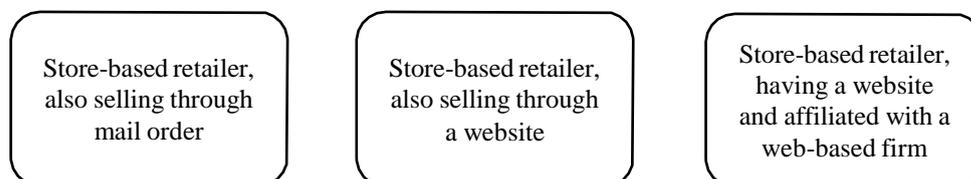


Figure 2. Multichannel retailing
Source: Adapted from Levy, Weitz & Grewel (2019)

In spite of the increasing growth of online sales, e-Marketer (2017a) reported that most consumers in North America still preferred to shop in-store or store-based retailers, 57.3% in consumers aged 18-22 years old and 54.8% in consumers aged 23-37 years (Table 1). In addition, US Internet users who had a great experience shows consumers who bought products in physical stores were more likely to buy from another channel (Table 2) (e-Marketer, 2017b).

Table 1: Preferred method for shopping according to Internet users in North America, by age, June 2017
% of respondents

Ages	In-store	Online-Mobile	Online-Desktop/Laptop
18-22 years old	57.3%	26.7%	16.0%
23-37 years old	54.8%	25.8%	19.4%

Source: e-Marketer, 2017a

Table 2: Behaviors of Internet users who had a great customer experience, by channel, Dec. 2016
% of respondents

Channels	In-store	Online	Mobile
More likely to buy via another channel	75%	58%	42%
More likely to recommend the retailer	74%	64%	54%
More likely to buy via the same channel	50%	60%	64%

Source: e-Marketer, 2017b, read as 75% of respondents who had a great customer experience in-store said they were more likely to buy from another channel

2.6 Consumer culture theory

According to Arnould and Thompson (2005, 2007) who coined the term “consumer culture theory” or CCT, CCT refers to a family of theoretical perspectives that explain the dynamic relationships between consumer actions, the market, and cultural meanings. Consumer culture theory explains the symbolic, embodied, and experiential aspects of acquisition behaviors and the sociocultural complexities of exchange behaviors and relationships (Arnould & Thompson (2005). CCT has been recognized in all major marketing journals since 2005 (Joy & Li, 2012). CCT is now considered by marketing scholars as a sub-discipline in the field of consumer behavior (MacInnes & Folkes, 2010). Furthermore, CCT integrates various disciplines such as anthropology, sociology, media studies, critical studies (Joy & Li, 2012). Arnould and Thompson (2005) identify four domains within which researchers have applied CCT as: (1) consumer identity projects, (2) marketplace cultures, (3) the socio-historical patterning of consumption, and (4) mass-mediated marketplace ideologies and consumers’ interpretive strategies. The variables studied in the current study and consumer behavior in the context of store-based retailers and Internet-based retailers can be attributed to the three domains of the CCT, that is, the marketplace cultures, the socio-historical patterning of consumption, and mass-mediated marketplace.

3. Model building and hypotheses development

An extensive review on studies about retailing in general and multichannel retailing indicates found that there are six relevant constructs or factors that are found to directly or

indirectly influence consumer decision making. These constructs include retail mix, the service environment customer experience, customer value, relationship quality, and consumer decision making. The retail mix and the service environment are used for both the store-based retailers and Internet-based retailers.

Exogeneous variables are the variables that are independent and not affected by any other variables. In this study, two exogeneous variables are found: retail mix and the service environment for store-base retailers and Internet-based retailers, and explained as follows:

Retail mix is defined as the combination of merchandise, price, advertising, promotion, communication, location, and atmospherics that retailers offer to customers (Dunne & Lusch, 2008; Levy, Weitz and Grewel, 2019). The retail mix is a set of decisions retailers to satisfy their customer needs and influence their purchase decisions. Elements in the retail mix includes types of merchandise and services offered, merchandising pricing, advertising and promotions, store design, merchandise display, customer service providing by salespeople, store atmosphere, and convenience of the store's location (Berman, Evans & Chatterjee, 2018; Levy, Weitz & Grewel, 2019). These factors are controllable and changed by retailers in order to respond to customers' lifestyles and preferences. They are the reasons that customers want to shop at that specific retailer, whether store-based or Internet-based.

H1: Retail mix of store-based retailers directly affects customer experience

H2: Retail mix of store-based retailers directly affects customer quality

H3: Retail mix of store-based retailers directly affects relationship quality

H4: Retail mix of Internet-based retailers directly affects customer experience

H5: Retail mix of Internet-based retailers directly affects customer quality

H6: Retail mix of Internet-based retailers directly affects relationship quality

The service environment refers to the both tangible and intangible aspects of a retail store design (Puccinelli et al., 2009). Past research on the retail environment identifies three primary sets of cues: design, ambient and social factors.

H7: The service environment of store-based retailers directly affects customer experience

H8: The service environment of store-based retailers directly affects customer quality

H9: The service environment of store-based retailers directly affects relationship quality

H10: The service environment of Internet-based retailers directly affects customer experience

H11: The service environment of Internet-based retailers directly affects customer quality

H12: The service environment of Internet-based retailers directly affects relationship quality

Mediating variables include customer experience, customer value, and relationship quality. **Customer experience** is defined as the instance(s) of a customer's encounter(s) with the firm's product offerings (Kumar, Anand & Song, 2017). Past research has focused on factors affecting customer experience. For example, Verhoef et al. (2009) argue that customer experience is holistic in nature and involves the customer's cognitive, affective, emotional, social and physical responses to the retailer. They also state that past customer experience, store environments, service interfaces, store brands also affect customer experience. Grewal, Levy & Kumar (2009) propose that firm-controlled factors affect retail customer experience, which in turn influences marketing and financial metrics of firms. The firm-controlled factors include promotion, price, merchandise, supply chain and location.

H13: Customer experience directly affects consumer decision making

Customer value is defined as the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. From the perspective of customers, customer value is the perception a shopper has of a value chain (Berman, Evans & Chatterjee, 2018). It is the customer's view of all benefits from a purchase (formed by the total retail experience). Value is based on perceived benefits received versus the price paid (Levy, Weitz & Grewel, 2019). It is different from one type of customers to another. For example, price-oriented shoppers want low prices, service-oriented shoppers will pay more

for superior customer service, and status-oriented shoppers will like to visit prestigious stores to buy luxury goods. In the context of retailer-shopper relationships, value perceptions result from the difference between the benefits received by the shoppers and the sacrifices they need to make in the exchange with the retailer (Inman & Nikolova, 2017). Retailers, offline or online, create value for their customers by providing an assortment of products and services, offering in smaller quantities, holding inventory, and providing services.

H14: Customer value directly affects consumer decision making

Relationship quality is defined as the degree of appropriateness of a relationship to fulfill the needs of the customers associated with that relationship. The variables that measure the degree of relationship quality include customer satisfaction with the retailer's performance, their trust in the retailer, and customers' commitment to the relationship with the retailer. Loyal customers are the backbone of a business. So, it is important that retailers retain their loyal customers through repeated purchases in a trusting relationship. Relationship in retailing includes all the activities designed to attract, retain, and enhance customer relationships. As Dunne and Lusch (2008) stated, retailers would no longer compete by expanding large, homogeneous chains offering only low prices. Profitable retailers of the future would be those who concentrated on building long-term relationships with loyal customers by promising and consistently delivering high-quality products, supported by good service, shopping aids to ease in the buying process.

H15: Relationship quality directly affects consumer decision making

Endogenous or dependent variables are variables that are affected and caused by independent and/or mediating variables. In this study, there is one endogenous variable, consumer decision making. **Consumer decision making** is defined as the consumers' decision to continue their purchases at the retailer, the preferred type of retailers between store-based and Internet-based, and their willingness to recommend the store to other people. Consumer decision making is a process by which consumers determine whether, what, when, where, how from whom, and how often to buy goods and services. Berman, Evans & Chatterjee (2018) suggest that the decision process must be understood from two different perspectives: (1) what product or service the consumer is thinking about buying (what) and (2) where the consumer is going to buy that item (where), that is in bricks-and-mortar stores, Internet-based retailers. The consumer decision process consists of six steps: stimulus, problem awareness, information search, evaluations of alternatives, purchase, and post-purchase. Each time a consumer buys a product or service, that consumer goes through a decision process. In some cases, all six steps in the process are used: in other cases, only a few steps are employed. Every time a consumer buys a good or service in a store-based retailer or an Internet-based retailer, the consumer utilizes a form of the decision process. The process is often performed subconsciously, and a consumer is not aware of its use (Berman, Evans & Chatterjee, 2018; Levy, Weitz & Grewal, 2019).

Based on an extensive literature review in 2.4, a structural model is developed to represent the relationships between constructs that have been found in extant research in multichannel retailing. The research instruments used to collect primary data from the sample groups are self-administered questionnaires that ask about eight constructs. A construct is an unobserved variable that needs observed variables to measure it. The model of the current study is composed of two independent constructs for store-based retailers and Internet-based retailers, three mediating constructs, and one dependent construct. More specifically, the independent variables include retail mix and the service environment of both store-based retailers and Internet-based retailers. There are three moderating variables that are found to mediate the effects of the retail mix and the service environment on consumer decision making. The dependent variable of this study is consumer decision making. The conceptual framework of this study is proposed in Figure 3.

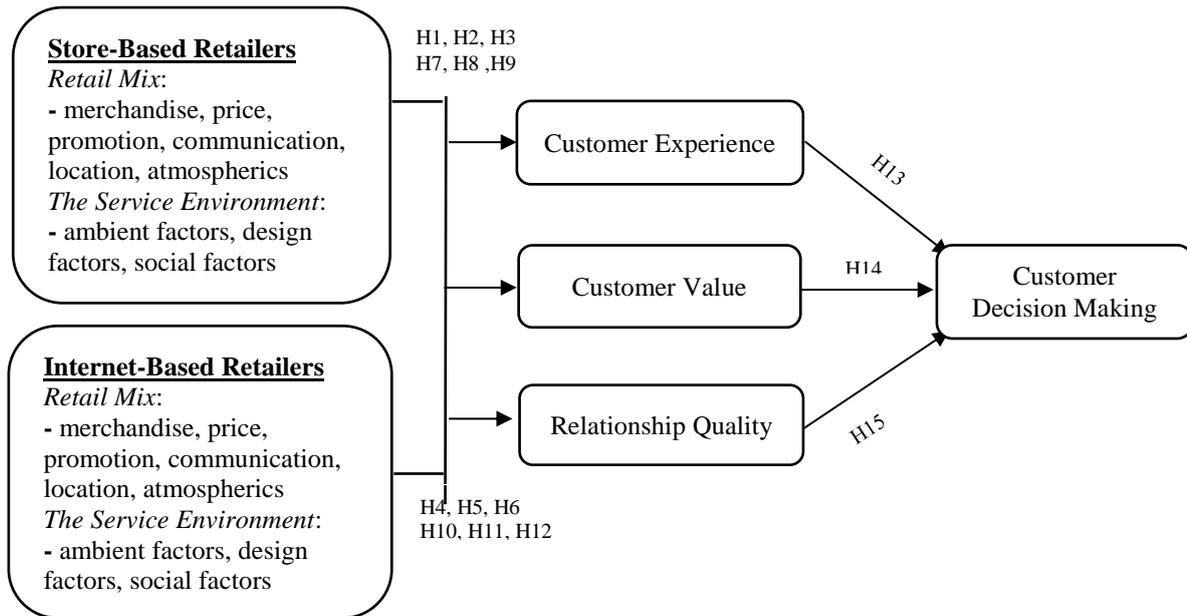


Figure 3. Proposed research model

4. METHODOLOGY

4.1 Population and samples

In order to test the proposed hypotheses, primary data are collected using self-addressed questionnaires. The population and samples of this research are Thai consumers who had bought goods in both the store-based retailers and the Internet-based retail store in the past year. A purposive sampling method is used to collect data from Thai people ages between 18 and 69. According to guidelines on the use of structural equation modeling which requires a large sample of 200 to 400, depending on the complexity of structural models studied. Another guideline is 20 times of parameters or observed variables (Kline, 2015; Schumacker & Lomax, 2015). There are 22 observed variables of the eight latent variables in the conceptual framework in Figure 3, so the required sample size is 22 x 20 or 440 samples.

4.2 Measures

The research instrument developed for this study is self-reported questionnaires based on items from previous research and modified to the subject of retailing, multichannel retailing, e-tailing. The items in the questionnaire are developed using standard procedure for the development of a research instrument. Past empirical studies examining retail shopping, multichannel shopping, mobile shopping, internet shopping behaviors were reviewed. Based on the literature review, a questionnaire was developed and consisted of four parts. The first part of the questionnaire had questions on demographic details of the respondents including gender, age group, education level, occupations, and monthly income.

The second part asked eight items about retail shopping behavior in general. The third part consists of 29 seven-point Likert-scale questions about respondents' buying behavior in store-based retailers, and the fourth part is 28 seven-point Likert-scale questions about respondents' behavior of buying in Internet-based retailers. The fifth and final part of the

questionnaire asks respondents 24 questions about customer experience, customer value, relationship quality, and consumer decision making, respectively.

4.3 Data collection

Primary data for the study are collected through structured questionnaires. A team of undergraduate students at a public university in Bangkok were trained by the researcher to approach respondents in mall intercepts at four shopping malls and centers in Bangkok. Those shopping malls and centers are chosen because Thai people of all ages and genders like to visit to buy goods and do other activities. The respondents were asked face to face to spare a few minutes to fill out the questionnaires. Participation in this study is voluntary and no gifts are offered to the respondents. At the time of writing this paper, 440 questionnaires have been collected and are being checked for correctness and completeness for further processing with the SPSS 21.0 and AMOS 21.0 programs.

4.4 Statistical analysis

Both descriptive and inferential statistics are deployed in this study. The descriptive statistics include numbers, percentages, means, standard deviations, skewness, and kurtosis, using SPSS 21.0. The inferential statistics used will be structural equation modelling (SEM) to for model testing which is the purpose of this study. The use of SEM is to test a theory by specifying a model that represents predictions of that theory among plausible constructs measured with appropriate observed variables. If such a model does not fit the data, this outcome is interesting because there is value in reporting models that challenge theories. The hypothesized model can be tested statistically in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data. This study will employ AMOS 21.0 program to analyze and test the model.

5. FINDINGS AND CONCLUSION

An extensive review of literature has found that there are six constructs that can be used to study the consumer behavior of shopping in store-based retailers and Internet-based retailers. These six constructs are found to directly or indirectly influence consumer decision making. These constructs include retail mix and service environment of store-based retailers and Internet-based retailer, customer experience, customer value, and relationship quality. More specifically, there are two independent variables: retail mix and the service environment of store-based retailers and Internet-based retailers. The three mediating variables include customer experience, customer value, and relationship quality. The dependent variable of this study is consumer decision making as shown in Figure 3.

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REFERENCES

- Arnould, E.J. & Thompson, C.J. (2005). Consumer Culture Theory (CCT): Twenty Years of Research. *Journal of Consumer Research*, 31, pp.868-882.
- Arnould, E. & Thompson, C. (2007). Consumer Culture Theory (And We Really Mean *Theoretics*): Dilemmas and Opportunities Posed By An Academic Branding Strategy. *Research in Consumer Behavior*, 11, pp.3-22.
- Berman, B., Evans, J.R., & Chatterjee, P. (2018). *Retailing Management*. 13th ed., Pearson Education Limited, Harrow, United Kingdom.
- Bharadwaj, A., Chaudhary, A., Kittikachorn, P., & Rastogi, V. (2017). *Five Consumer Trends to Watch in Thailand*. The Boston Consulting Group.
- Dent, J. & White, M. (2018). *Sales and Marketing Channels: How to build and manage distribution*

- strategy*. Logan Page Ltd., United Kingdom.
- Dunne, P.M., & Lusch, R.F. (2008). *Retailing*, Thompson South-Western, Mason, USA.
- e-Marketer, August. (2017a). *Customer Experience 2017: The Journey Toward Customer-centricity Continues*. www.emarketer.com, accessed on January 2017.
- e-Marketer, October. (2017b). *Customer Behavior Roundup: How Marketers & Advertisers Can Learn From Retail Activity Data*. www.emarketer.com, accessed on January 2017.
- Euromonitor International. (2016). *What's New in Retail: Emerging Global Concepts in 2016*.
- Feeny, A., Vongpatanasin, T., & Soonsatham, A. (1996). Retailing in Thailand. *International Journal of Retail & Distribution Management*, 24, 8, pp.38-44.
- Grewal, D., Levy, M., & Kumar, V. (2009). Customer Experience Management in Retailing: An Organizing Framework. *Journal of Retailing*, 85, 1, pp.1-14.
- Inman, J.J., & Nikolova, H. (2017). Shopper-Facing Retail Technology: A Retailer Adoption Decision Framework Incorporating Shopper Attitudes and Privacy Concerns. *Journal of Retailing*, 93, 1, pp.7-28.
- Joy, A. & Li, E.P.H. (2012). Studying Consumption Behavior through Multiple Lenses: An Overview of Consumer Culture Theory, *Journal of Business Anthropology*, 1, 1, pp.141-173.
- Kline, R.B 2016, *Principles and Practice of Structural Equation Modeling*, 4th ed., The Guilford Press, New York, NY.
- Kumar, V., Anand, A., & Song, H. (2017). Future of Retailer Profitability: An Organizing Framework. *Journal of Retailing*, 93, 1, pp.96-119.
- Levy, M., Weitz, B.A., & Grewal, D. (2019). *Retailing Management*. 10th ed., McGraw-Hill Education, New York, NY.
- MacInnes, D.J. & Folkes, V.S. (2010). The Disciplinary Status of Consumer Behavior: A Sociology of Science Perspective on Key Controversies. *Journal of Consumer Research*, 36 (April), pp.899-914.
- Palmatier, R.W., Stern, L.W., & El-Ansary, A.I. (2015). *Marketing Channel Strategy*. 8th ed. Pearson Education Limited, Essex, England.
- Panjakajornsak, V. (2017) A Model of Consumers' Behavioral Intention: A Study of Generations X and Y. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 7, 4, pp. 219-229.
- Puccinelli, N.M., Goodstein, R.C., Grewal, D., Price, R., Raghurir, P., & Stewart, D. (2009). Customer Experience Management in Retailing: Understanding the Buying Process. *Journal of Retailing*, 85, 1, pp.15-30.
- Rosenbloom, B. (2013). *Marketing Channels: A Management View*. South-Western, Cengage Learning.
- Schumacker, R.E., & Lomax, R.G. (2016). *A Beginner's Guide to Structural Equation Modeling*. 4th ed., Routledge, New York, NY.
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L.A. (2009). Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing*, 85, 1, pp.31-41.
- Watson, G.F., Worm, S., Palmatier, R.W., & Ganesan, S. (2015). The Evolution of Marketing Channels: Trends and Research Directions. *Journal of Retailing*, 91, 4, pp.546-568.

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