Purchasing Behavior via Mobile Applications of Consumers in Bangkok

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Abstract

The research on purchasing behavior through mobile applications was a quantitative research study with 400 consumers in the Bangkok area. The statistics used in the research are Mean Finding, Standard Deviation, and Factor Analysis by creating new variables of a group of variables by means of factor analysis. The result is a marketing factor consisting of the 6 groups, Shipping Safety, Easy Easy, Right preservation, Emphasis on advice and answers to questions, Social Media and Data Privacy.

Introduction

Background and Significance of the Study

In recent years online shopping has become a modern consumer choice behavior. And it becomes even more active after a large overseas online store platform officially launches in Thailand by spending all budgets on public relations and marketing. It offers a new shopping experience and a wide range of promotions that attract new customers and is rapidly accepted by Thai people across the country.

From the evaluation of the Electronic Transactions Development Agency, Ministry of Digital Economy and Society, it was found that from 2017 to the present, e-commerce business in Thailand, in the business-to-consumer channel (B2C), has seen an exponential growth direction. From the forecast for the year 2019, it was found that B2C entrepreneurs had sales of goods and services online worth up to 1.49 trillion baht, an increase from 2017, which was worth 7.58 billion baht to 97.27% (Ministry of Digital for Economy and Society, 2020).

Besides, the increase in the number of smartphone users and the development of applications make it more convenient to shop online; for example, searching for the desired product and making online payment can be proceeded conveniently, fast, securely without fees. The system is developed to offer products and promotions that meet individual needs. The popularity of shopping apps has expanded rapidly, and it can change the current consumer behavior by purchasing from a computer screen. It comes to shopping through an application on your mobile phone. According to a survey of internet users in Thailand aged 16-64, in the third quarter of 2019, 69% of people bought products or services via their mobile phones (GlobalWebIndex, 2020).

In addition, the global COVID-19 outbreak, including in Thailand, has led to a long lockdown. Department stores and shops, both small and large, were unable to sell products. Consumers were limited when they leave their homes, causing them to remain at home and unable to go out and shop as usual. And even after the government loosened the strictness of

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the lockdown measure, the government continued to campaign for Thais to stay at home, stop infection for the nation, and live with caution. The consumers have also been in fear of being in crowded places. Because of the risk of contracting the COVID-19 virus, this situation has led to a dramatic increase in online shopping behavior during the COVID-19 pandemic (TMB Analytics Economic Analysis Center, 2020).

Today's mobile phone usage is not limited to communication and entertainment. It has evolved into a tool for multi-purpose online transactions and complete merchandising. Changes in all dimensions seem to be in the growth since the development of performance in both hardware and software to infrastructure continues to advance. And the number of people across all sectors of business offering products through applications has grown significantly. It has caused changes in terms of consumer behavior in purchasing products inevitably. Therefore, the study of consumers' purchasing behavior via mobile applications, Bangkok, is essential for planning current business strategies to keep up with future changes.

Research Objectives

1. To study consumers' decision-making behavior via applications in Bangkok.
2. To study the compositions of consumers' marketing factors on purchasing products via applications in Bangkok.

Methodology

For the research population, because the researcher does not know the exact value of the buyer population through the e-commerce system, the researcher used the male and female population in Bangkok at 5,676,648 people (Administration Strategy Division Statistics Bangkok Development Plan, 2018). For determining the sample, because the population of the buyers through e-commerce system cannot be exactly identified, it is, therefore, necessary to determine the appropriate sample size using the formula for determining the sample size from the population proportion at approximately 95% confidence level the proportion or percentage. The sample size can be calculated using the following formula.

$$n = \frac{P(1-P)(Z)^2}{e^2}$$

The sample size in this research was 384 samples. To prevent discrepancies and build the research's credibility, the sample group of this research is 400 samples.

Therefore, the researcher set a minimum sample group of 400 people and used Multi-Stage Sampling as follows:

Step 1 Simple Random Sampling was used by randomly selecting the areas divided by the administrative area of Bangkok into six administrative groups, consisting of 6 groups, divided into 2 groups, 12 districts, as follows: Pathum Wan District, Samphanthawong District, Khlong Toei District, Sathorn District, Bang Khen District, Chatuchak District, Min Buri District, Khlong Sam Wa District, Khlong San District, Bang Bon District, Taling Chan District, Nong Khaem District, 35 sets per district.

Step 2 Convenience Sampling was used to collect data by using the prepared questionnaire to collect the data at a community location such as a market outside a shopping center. Village, etc.

Statistics for Research

In conducting this research, when data obtained from questionnaires of 400 samples were collected, coded, and analyzed by a statistical package for research as follows.

Descriptive Statistic is used for describing various characteristics of the studied population which the results obtained from the study can refer to other population groups which consist of the following statistics

1. Percentage method
2. Finding the Mean and Standard Deviation
3. Creating new variables of variable groups with Factor Analysis to reduce the number of variables. Principle components were used to extract factors and rotate Varimax axes of orthogonal factors to analyze the relationships between variables and groups.

Results

General information of respondents

Studies have shown that the samples were female, aged $20-25$ years with a bachelor's degree and private company employees

Shopping behavior

The study has shown that the sample group bought the most food and beverage products. The frequency of purchases was daily. And there was an average cost of 200-500 baht for each purchase. The payment was proceeded by transferring money through a bank application. Furthermore, the sample group advised others to order products through the application because it was safe from the coronavirus. It was quick and easy to order and pick up.

Factors affecting shopping through the Internet

Marketing mix factors affecting buying decisions are as follows.

1. Overall product factors have a large influence on purchasing decisions. When considering each factor, it was found that the sample group decided to buy the product from the quality of the product the most.

2. Overall price factors have a moderate influence on purchasing decisions. When considering each factor, it was found that the sample group gave the most important to the reasonable price of the product.

3. Overall distribution factors have a large influence on purchasing decisions. When considering each factor, it was found that the sample group gave the greatest importance to the delivery speed.

4. Overall marketing promotion factors have a large influence on purchasing decisions. When considering each factor, it was found that the sample group gave the most importance to advertising on Social Media.

5. Overall privacy factors have a large influence on purchasing decisions. When considering each factor, it was found that the sample group gave the highest priority to keeping the personal information of customers confidential.

6. Overall personal service factors have a large influence on purchasing decisions. When considering each factor, it was found that the sample group put the most significant emphasis on providing advice and consultation on various inquiries to individual clients through the application.

Analysis of marketing factors on shopping via the internet

The marketing factors related to online shopping were used to analyze the suitability of variables and factor extraction were conducted with Principal Component Analysis. Varimax rotation method was used to analyze the relationships between variables and grouping. The researcher found that a total of 8 groups could be grouped as follows:

Group 1 Shipping Safety
Group 2 Easy Easy
Group 3 Right preservation
Group 4 Emphasis on advice and answers to questions.
Group 5 Social Media
Group 6 Date Privacy

Group 1 Shipping Safety

The compositions of this group included a social distancing system, such as the delivery that consumers and shippers don't face each other for the safety of the coronavirus. There is a system to prevent the sellers and the shippers from touching the products.

Group 2 Easy Easy

The compositions of this group consist of easy-to-use and quick ordering. Access to the application is always updated and also has an easy ordering process.

Group 3 Right Preservation

The compositions of this group consist of guaranteed delivery speed and getting the right ordered product. It offers a return or exchange service. The system also offers a money-back guarantee when the product is not delivered on time or as ordered. There is a clear display of product prices.

Group 4 Emphasis on advice and answers to questions.

The compositions of this group include advising on questions to each consumer via an application.

Group 5 Social Media

This group's compositions include using advertising communication with customers through social media such as Line and Facebook, communicating about the product, enhancing purchasing decisions, and the thorough publicity of information.

Group 6 Data Privacy

This group's compositions consist of consumer anonymity, permission request from consumers to send information, and personal data privacy, such as credit card numbers, addresses, phone numbers, and e-mail.

Discussion

Most consumer groups were female, aged 20-25 years with a bachelor's degree, and private company employees. This is consistent with Kongkam (2016), studying the purchasing behavior of products and services among Application Shopee users in Thailand. Most of the consumers were female aged 21-25 year office workers with a bachelor's degree.

Purchasing Behavior

The study has shown that the sample group bought the most food and beverage products. The frequency of purchases was daily. There was an average cost of 200-500 baht for each purchase. The payment was made by money transfer via banking applications. The reason for purchasing was due to the safety of the coronavirus. The sample group would advise others to order products via the applications because it was the safety of the virus, convenient ordering, easy payment, and fast delivery, consistent with Wongchavalitkul et al. (2017). The study of purchasing behavior and analysis of factors affecting buying goods or services through the consumer electronic commerce system in Nakhon Ratchasima Municipality, Nakhon Ratchasima Province. The research results show that the consumer groups were connected to the internet every day for 2 hours or more. They used the internet in the workplace and ordered goods or services during 9.01-12.00 hours. The consumers had a frequency of purchasing products or services via the internet once a month. There was an average of each purchase in the range of 501-1,000 baht. The sample groups of

consumers used a search engine, such as Google, for a store to go directly to the shop's website and to purchase goods or services, and they made payment by transferring money to the seller's bank account. The consumers bought products through the internet because they could find goods or services easily and quickly. The factors affecting the purchase of products via e-commerce included those that focus on marketing mix factors, privacy factors, and personal service factors. The result is similar to the study of factors and behaviors that affect consumers' decision to use mobile applications to buy products via smartphones and tablets, Bangkok by Piriyaphonpong (2015). The result shows that the 7Ps market mix factor was most likely to buy apparel/accessories/cosmetics and use Lazada. Most of the consumers downloaded the app from Play Store the most and know the application used to buy products from the advertising channel through Facebook (Facebook), with the emphasis on the service of the productivity application that had the largest number of employees to serve for the number of customers and focused on the security of payment through applications the most, including the process of applications for payment confirmation via e-mail/calling the most. There were pre-dispatched external factors, such as economic aspects. Most of the respondents' household spending, technology provided focus on technological factors of the signal system and the speed of the internet the most.

Strategic Suggestion

Entrepreneurs in the New Normal era have to adjust themselves to the new practice, such as social distancing. The research shows that consumers in the shipping safety group focused on social distances, such as delivery that shoppers and shippers don't face each other for the safety of the COVID-19 virus. There is a system to prevent the seller and the sender from touching the product. In addition, it may add other marketing measures that increase your sales opportunities, such as packaging or the area used to deliver goods that are safe and pay attention to the freshness of the goods and the safety of the COVID-19 virus. They are advised to create a delivery model or a product delivery method, just like a customer visiting a restaurant. In addition to food products, clothing, or cosmetics products, technology may be applied to help customers try products without coming to the store.

References

Administration Strategy Division Statistics Bangkok Development Plan. (2018). *Population in Bangkok Metropolis 2008-2018*. Retrieved September 17, 2020, from http://www.bankok.go.th/pipd/sub/16730

Global WebIndex. (2020). *DIGITAL 2020: Thailand*. Retrieved September 17, 2020, from https://datareportal.com/digital-in-thailand

Kongkam, N. (2016). *The study of purchasing behavior of products and services of Shopee Application users in Thailand*. Master of Business Administration, Silpakorn University. [In Thai]

Ministry of Digital Economy and Society. (2020). *E-Commerce Survey in Thailand 2019, Value of e-Commerce Survey in Thailand 2019*. Retrieved September 17, 2020, from https://www.statista.com/statistics/1003758/thailand-e-commerce-value-industry/

Piriyaphonpong, Y. (2015). A study of consumers' factors and behaviors affecting the decision of using mobile application to buy products via smartphones and tablets of in Bangkok. *National academic conference year 2015*, 9 June 2015. Bangkok: Faculty of Communication Arts and Management Innovation National Institute of Development Administration.

Small and Medium Enterprise Development Institute. (2020). *E-commerce market survey. The highest growth force in 2020*. Retrieved September 18, 2020, from https://ismed. or.th/SPR220163.php

TMB Analytics Economic Analysis Center. (2020). *4 Digital Factors Support SMEs Growing After COVID*. Retrieved September 17, 2020, from https://www.tmbbank.com/en/ newsroom/news/pr/view/SmartSME-4factors- Digital.html

Wongchavalitkul, B., Wongchavalitkul, S., Limsarun, T., Prachpreecha, O., Prachpreecha, T., & Jantakat, J. (2017). A study of purchasing behavior and factor analysis on the purchase of goods or services through the consumer electronic commerce system in Nakhon Ratchasima Municipality, Nakhon Ratchasima Province. *Journal of Business Administration, Association of Private Higher Education Institutes of Thailand under the Royal Patronage Her Royal Highness Princess Maha Chakri Sirindhorn*, *6*(1), 95-113. [in Thai]