

# **CAUSAL FACTORS OF INTENTION TO USE FOOD DELIVERY SERVICE VIA MOBILE APPLICATION FOOD PANDA FOR CONSUMERS IN NONTHABURI PROVINCE**

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## **Abstract**

This research aimed to develop the causal factors of consumers' intention to use food delivery service via mobile food panda application in Nonthaburi Province and to verify the consistency of causal factors. It was developed with empirical data using questionnaires as a tool to collect data from people who have used the food delivery service through the Mobile Food Panda app. The statistics used for data analysis were structural equations used in the analysis of causal factors to determine the path of influence, causal factors of the variables consisted of 5 areas: 1) consciousness 2) perception of use. Tasks 3) Perception of Ease of Use 4) Exposure to Experience and 5) Intention to Use the Service

The results showed that the developed causal factors were consistent with empirical data, with a predictive coefficient of 0.89, indicating that the variables could explain the variability of food delivery intentions through the mobile food panda app. Of consumers in Nonthaburi province and to examine the consistency of causal factors developed with empirical data, 89% found that exposure aspect had the greatest influence on their intention to use the food delivery service through the app. Mobile Food Panda for consumers in Nonthaburi province.

**Keywords:** Causal Factors, Service Usage, Food Delivery, Mobile Food Applications Panda, Nonthaburi Province

## Introduction

Retail business in the digital age Exploiting large databases or Big Data As retail business enters the digital age, online trading grows and the more people spend via E-Payment, it creates a huge database. That can be used to enhance business efficiency and use in sales and marketing development, merchandising data in each area can be used for inventory management and GPS data to increase efficiency and reduce costs in the transportation system. In this regard, the investment in Big Data has a relatively high cost, with the minimum cost of investments in storage technology and future service-based computing models from the application of many different technologies, for example, stores. Merchants and banks may use a Tokenization system for in-store payment. Contactless and HCE systems are installed so they can be used with NFC tools without relying on a mobile phone service provider. Tokenization sites, such as PayPal and Alias, may also apply. Tokens instead of email or phone numbers to encrypt data, if sensitive information such as the customer's credit card number originally held by the merchant can be stored in the system's database. Tokenization, which is more secure, is trade without borders. There is no continent or country division. There are no restrictions on distance and travel. Able to purchase products from one store and travel to shop from another store on different continents in just minutes, reaching large target customers around the world, expanding buyer base, able to trade all the time. 24 hours and open every day without holidays. There is no need to hire a sales person because E-Commerce will automate the trade without having to have inventory or very little. There is no need to cost to create. A commercial building to use as a shop just by creating a Web Site is like a shop by E-Commerce business It is a business with a very high growth rate in Thailand as Thai consumers have more digital lifestyles, and more activities that were done offline are increasingly online, such as flight bookings. Hotel Reservation, Food Ordering and Food Delivery Service and watching movies, listening to music, etc. (Donty Mesom, 2017)

Consumer behavior changes with economic and urban expansion. Working people have limitations on time and travel. With the hasty lifestyle As a result, the restaurant business has to adjust its strategy to be in line with consumers, where Grab Food is one of the businesses that have adapted to meet the changing needs. By bringing online presence as a connector, activities or services are offline together. It brings the advantages of fast communication. Convenience via online channels to help solve time constraints and budget. To create options for access to products and services in daily life comprehensively (Punnyapha Dan et al, 2018).

Mobile Application Food panda is an application providing food delivery (Food Delivery) for consumers who are not easy to travel. And have a limited

time to be able to order food online quickly and easily. Mobile Application Food panda is the largest application # 1. And has the fastest growing rate in Thailand, that is, the changing consumer behavior With more ways to turn to food ordering apps Because you don't want to waste time traveling or waiting at the restaurant With statistics for using services in Nonthaburi and nearby provinces In the period of January - December 2019, there are more than 130 million times of service calls, 13 times more than competitors, with 1.8 million downloads, Mobile Application Food panda has the highest growth during January - June. Fri 2019, that is, has a total of 5 million orders (Thikumporn Srichan, 2019)

From the above reasons the researcher is therefore interested in developing the causal factor of the intention to use the food delivery service through the mobile food panda application among consumers in Nonthaburi Province. The data obtained from this research can reveal factors that affect consumers' intentions of using food delivery services through the mobile food panda app in Nonthaburi province. And to serve as a guideline for application development to provide food delivery service through the mobile food panda application for consumers in Nonthaburi province that corresponds to the behavior and needs of consumers today.

### **Research objectives**

- 1 . To develop the causal factors of intention to use the food delivery service through a mobile application.

Foodpanda of consumers in Nonthaburi Province

2. To verify the consistency of the causal factors that developed mobile food applications of Consumers in Nonthaburi Based on empirical data

### **Research scope**

- 1 . Scope of content this research focuses on the causal factor of the intention to use the food delivery service through the mobile food panda application among consumers in Nonthaburi province. The researcher determines the content scope: General information of the use of food delivery service through the mobile food panda application of consumers in Nonthaburi Province. Concept, theory, marketing mix factors. The decision to use the food delivery service through the mobile food panda application.

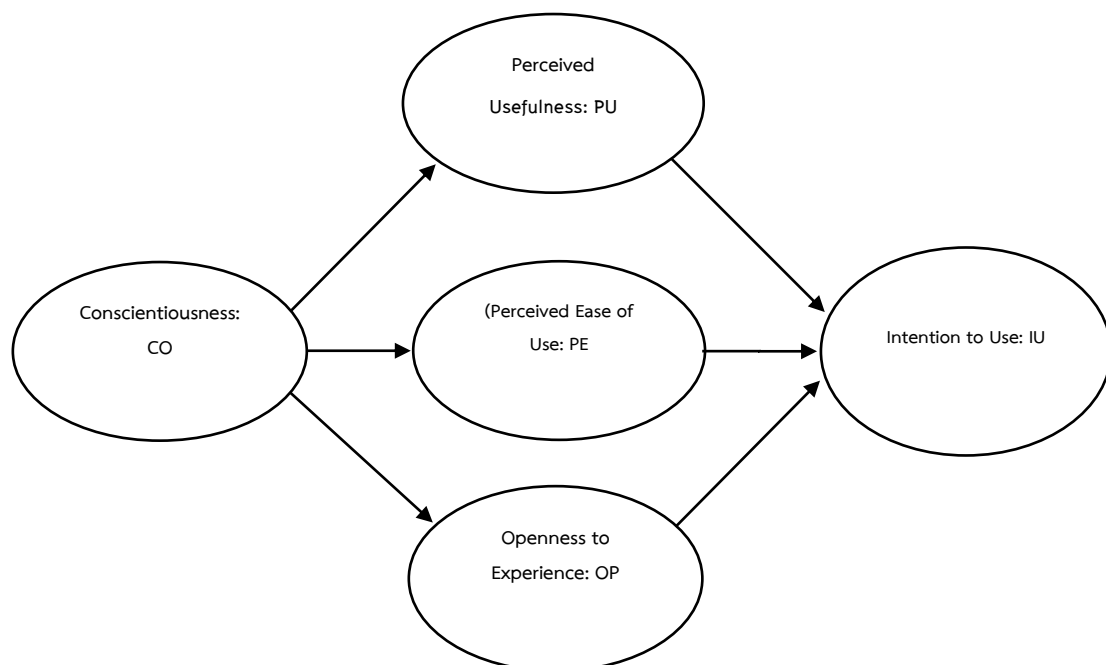
2. Area boundary for this research is an area in Nonthaburi province.

- 3 . Population scope this research was 3,787,879 users of freight forwarding companies in Nonthaburi Province (Population Statistics 2019), a sample group of 400 people.

4. Time Scope The period of study is November 2019 - January 2020, totaling 3 months.

### Research conceptual framework

The causal factor of the intention to use the food delivery service through a mobile application Food panda of consumers in Nonthaburi Province as a Survey Research, researchers have adopted the research framework of Moslehpour, M. et al., (2018) to improve and develop the causal factors of app traffic intent. Mobile Food Panda application of consumers in Nonthaburi province, including awareness of the benefits of use. On the perception of ease of use and exposure to experience which is a factor affecting the intention to use the food delivery service through the mobile food panda application of consumers in Nonthaburi province, as shown in Figure 1



### Related concepts and theories

Business-to-business electronics: The majority of Dell's merchandising is to a line of business, making them convenient through tools such as catalogs, shopping cards, comparators, and more. And credit card payments. Dale serves a group of nearly 100,000 customers with Premier Dell service. For example, British Airways (BA) considers Del as a strategic carrier. Dell sells mobile and desktop computers to 25,000 British Airways employees. Dell also provides an electronic procurement system to British Airways buying agents. Premier Dell also helps British Airways. (And other businesses) search, buy and track

purchases on Dale's website. The website allows users to select the PCs model for their business unit or organization. The purchase is complete when the user has purchased a computer from Dell. British Airways has placed an electronic procurement tool on its electronic workflow system. This allows employees to purchase computers directly on Dale's systems.

#### **Business-to-consumer electronic commerce**

Dale sells products to the general public directly from the company's private warehouse. Using standard and fair mechanisms such as electronic shopping lists, shopping carts, payment and shipping forms. Allows customers to determine the model and price of Dell computers and other products. Payment has to be made in advance. Customers can also join a refurbished computer auction. Online In addition to promoting their businesses by using e-procurement tools, as is the case with British Airways, Dale is also using e-commerce for its own procurement. Developed an electronic procurement model, which is a joint venture with partner British Airways. Part of this model is electronic bidding, known as reverse auctions. This means an auction where the buyer bids first and then the seller competes to bid. Dell uses electronic bidding when it comes to purchasing components of various products.

#### **Conscious mind**

Consciousness is a form of personality grouping that is popular with psychologists as it can help describe the structure of a person's international personality. Consciousness refers to a person's tendency to exhibit self-discipline. Know the duties Aim to be successful Person with high personality Often likes to plan ahead. This results in a person who has control over their actions. And direct the internal needs to be expressed appropriately avoid doing what you see that there will be a problem. Is viewed by others as intelligent, reliable, and the negative is often overworked Tend to want perfection Serious about everything Therefore looks like a serious person all the time No life boring (Digman, 1990)

#### **Perception of use benefit**

Perception of use benefit It is a key factor in the technology acceptance theory. And is considered an important variable that has been widely accepted to describe user behavior in research work related to technology products and services. In conclusion Functional awareness refers to the determinants of an individual's perception of the degree to which technology users can perceive how much information technology has contributed to productivity (Davis, 1989).

#### **Realization of ease of use**

Realization of ease of use It is an important factor in technology acceptance theory. This is a measure of the degree of the person who believes that if using a newly developed information system. With the newly developed information system has the ability to improve performance under the original

requirements that were already running. Which can be said that before the ease of use is realized, a goal must be established? There is a wide-spread of information system services. To create a good user experience (Davis, 1989).

### **Exposure to experience**

Exposure to experience it is a form of personality grouping that is popular with psychologists to help describe the structure of a person's personality internationally. By people with high personality will be someone who is quite imaginative Sensitive Perceive the beauty of art, sensitive to beauty, like to use intelligence can perceive their own emotions well. But if a person with low personality Often likes to have a conservative mind. Likes to think according to the traditional framework like things that are simple, not complicated or misleading not interested in art or science not so much emotional response (Digman, 1990).

### **Intention to use the service**

Service intent refers to the behavior or interest of users attempting to use that information technology in a way that decides to choose or act in a particular way as a result of the perception that a system is easy to use. Work which is the determining factor in terms of the quantity or success obtained, whether it meets the needs or expectations and awareness of the benefits received from information technology this resulted in the acceptance of the actual use. In addition, the purchase intention is also related to the Time Interval and Experience (Alharbi & Drew, 2014).

### **Electronic customer service**

Dale uses different tools to serve customers the best they can. To enhance the relationship with customers a customer-centric customer service approach is thus being implemented continuously. Dale offers a self-administered work desk, such as direct access to technical support, which is open 24 / 7 . There is product support as well as troubleshooting. Manuals, upgrades, downloads, news and press releases. Order status information Page "My Account" Web board (to exchange ideas Information and online experiences), bulletin boards, and consumer-to-consumer interaction. Training books and much more. Dale stores a large number of customer databases using a data acquisition machine. And carefully study the information about your customers in order to make them happy. Databases are also used for market development.

### **Intrabusiness EC.**

To increase the ability to accept orders shorten the time between ordering and delivery. And leverage customer service. Dell has partnered with Accenture to build a supply management system. (Existing product) High performance. Today, in Dell's facilities around the world there are programs that enable Dell to adapt to the changing technology and business environment to keep it up to date as a high-performance business. Dale also provides an automated factory schedule. And manage product lists using technology information and electronic supplies

### **Research method**

#### **Population and sample**

The population of this study is people who have previously used food delivery service through the mobile food panda app among consumers in Nonthaburi province. Which does not know the exact population.

The sample group of this research was 400 people who used the food delivery service via the mobile food panda app of Nonthaburi Province consumers. Causal Structural- Models with Latent Variable Wolf, et al. (2013), Kline, (2011) and Hair, et al. (2010) suggested that the sample size was appropriate. It should be in a ratio of 10-20 to 1 variables and the smallest sample is acceptable, given the Holster statistic that must be greater than 200 for the causal relationship factors to be in harmony with the empirical data. There were 20 observable variables in this study, requiring at least a sample of 300 people. And to prevent any discrepancies of information the researcher then added a sample of 400 people, obtained by Convenience Sampling.

#### **Tools used for data collection**

Characteristics of the tools used in this research It is an online questionnaire (Online Questionnaire), number 1 issue, divided into 2 parts as follows:

Part 1 General information of respondents The nature of the question is inquiring about the general information of the respondents, namely, have you ever used a food delivery service via the Mobile Food Panda application of a consumer in Nonthaburi Province, place of residence, gender, age, education level? Income per month and occupation, a total of 7 items

Part 2 Information on Factors Influencing Consumers' Intention to Use Food Delivery Service via Mobile Food Panda Application in Nonthaburi

Province. In which the question is a 7-level value estimate, divided into 5 areas, which are 1) Consciousness 2) Perception of benefits of use 3) Perception of ease of use 4) Exposure to experience and 5) Intention to use the service 25 items. A tool to validate content validity by offering five experts to check the content validity of the questionnaire, as well as to check the content validity of the language used, and then use the scores to find the consistency index. Of question the objective of the research (Index Of Congruence: IOC) was obtained with the index of consistency of all questions between 0.68-1.00, then the confidence value was used. (Reliability) by trying out (Try Out) with people who have used food delivery service through the mobile food panda application of consumers in Nonthaburi province. The questionnaire was used to find the alpha coefficient using the Cronbach's Alpha method. It was found that the whole question was 0.85. Confidence of 0.70 or more, indicating that the questionnaire was highly reliable (Thanin Silpa, 2017).

### **Data collection**

The researcher collected data by questionnaires from people who have used the food delivery service through a mobile application. Foodpanda of consumers in Nonthaburi Province There are 2 screening questions: 1) Have you ever used a food delivery service through the Mobile Food Panda application? The researcher will not analyze the data and 2) Do you live in Nonthaburi province If the respondents answered that no. The researcher will not analyze the data. By collecting data from questionnaires during November 2019 - January 2020, the total data collection period was 3 months, with 420 respondents. After that, the researcher selected a complete questionnaire. Continue to analyze statistical data

### **Data analysis**

Inferential statistics use causal relationship analysis to determine the path of causal influence of variables. Find the size of influence And how is the direction From the concepts and theories used by the researcher For reference, consistency was tested between hypothesized factors and empirical data, CMIN / DF statistical values less than 3.00, GFI, AGFI, CFI of 0.90 or more, and RMSEA, SRMR values less than 0.08, consistent with factor analysis statistical equations (Kris Rung Sungnoen, 2011)



## Research results

1. The results of the development of the causal factor of the intention to use the food delivery service through a mobile application Foodpanda of consumers in Nonthaburi Province The research results were found that The causal factor of the intention to use the food delivery service through the mobile food panda application of consumers in Nonthaburi province consisted of 5 variables classified as one external latent variable, namely consciousness and 4 intrinsic variables. These include 1) perception of usage, 2) perception of ease of use, 3 ) exposure to experience, and 4 ) service intent. The researcher has developed and drafted the factors by Based on the concept, theory and related research work To be used as a principle for the creation and development of the causal factor of the intention to use the food delivery service through the mobile food panda application of consumers in Nonthaburi Province, as shown in Figure 2.

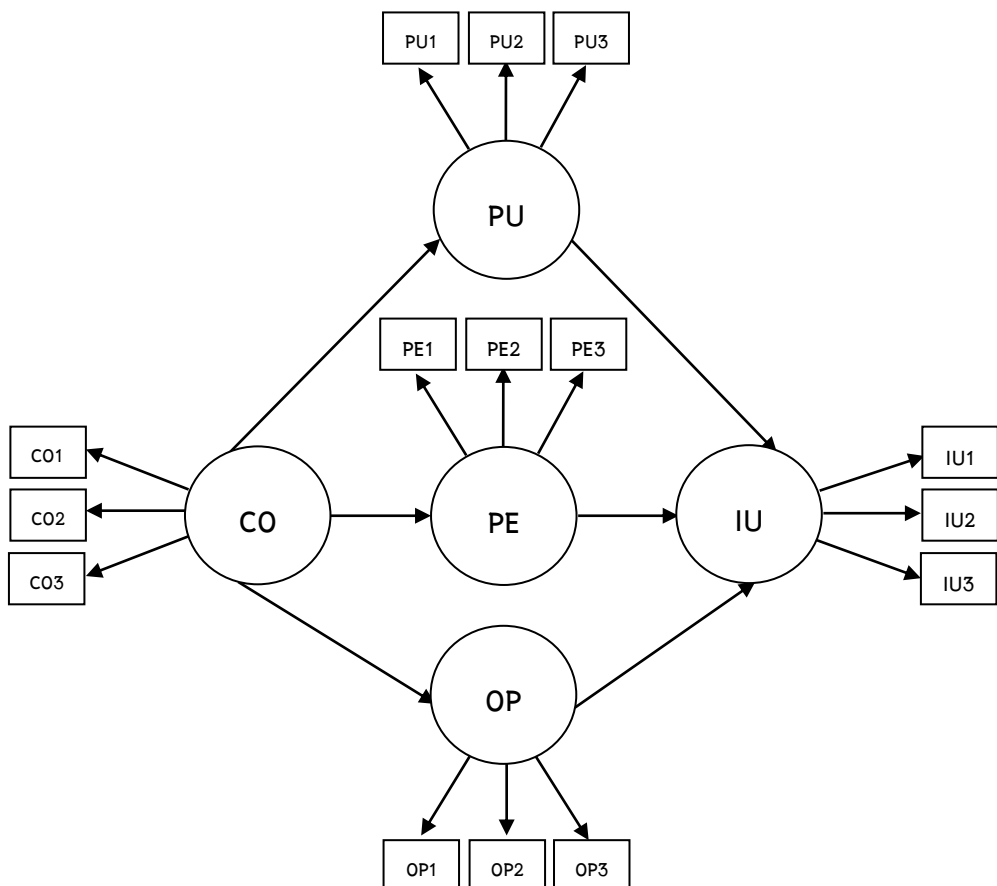


Figure 2 Causal Correlation Factors Intention to use food delivery service via Grab Food application of consumers in the Bangkok Metropolitan Region

2. Results of the Correspondence between Causal Factors of Intention to Use Food Delivery Service through Mobile Food Panda Application of Consumers in Nonthaburi Province With empirical data

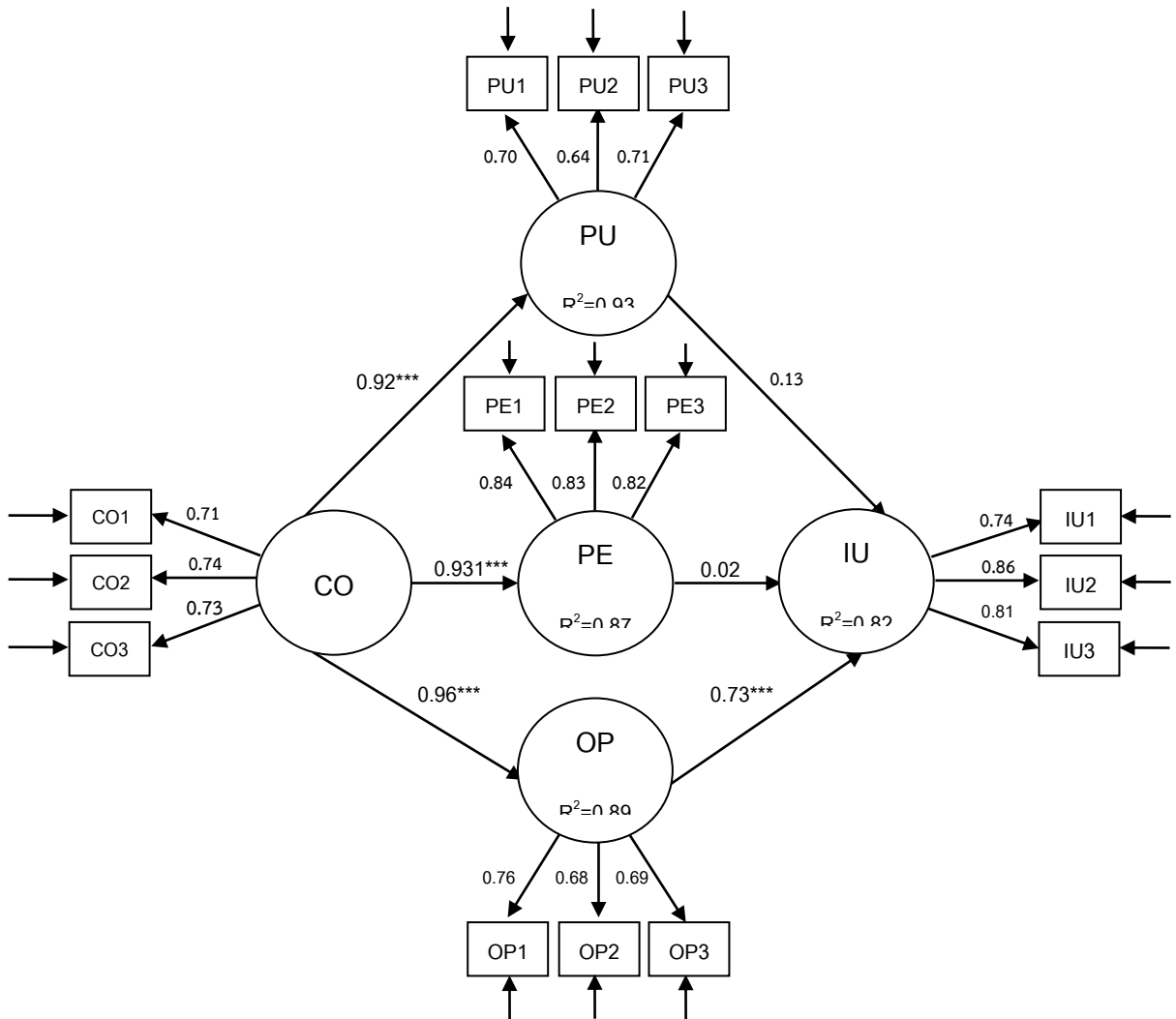
The results of verification of consistency, causal relationship factors using linear structural equation techniques. To find a path of causal influence of variables by testing the consistency between hypothesis and empirical data as shown in Table 1.

**Table 1** Indices indicate consistency and harmonization of causal factors of intention to use food delivery service through mobile food panda application among consumers in Nonthaburi province with empirical data.

Index	criteria,	statistics	inspection results
1. CMIN/df	< 3.00	1.98	Compliant / qualified
2. GFI	≥ 0.90 (Approach 1.00)	0.92	Compliant / qualified
3. AGFI	≥ 0.90 (Approach 1.00)	0.96	Compliant / qualified
4. CFI	≥ 0.90 (Approach 1.00)	0.94	Compliant / qualified
5. TLI	≥ 0.90 (Approach 1.00)	0.93	Compliant / qualified
6. RMSEA	< 0.05 (Approach 0)	0.05	Compliant / qualified
7. SRMR	< 0.05 (Approach 0)	0.04	Compliant / qualified
8. HOELTER	> 200	296	Compliant / qualified

From Table 1, the results of the verification of the consistency between the causal factors of the intention to use the food delivery service through the mobile food panda application of consumers in Nonthaburi province and the empirical data were found to be consistent. And a blend well with empirical data the relative chi-square value (CMIN / df) was 1.98, the mean square root index of the numerator (SRMR) was 0.04, the square root index of the estimation error (RMSEA). Is equal to 0.05, which satisfies the criterion where the SRMR and RMSEA values must be less than 0.08, and the GFI, AGFI, CFI and Hoelter indices at the .05 significance are 0.92, 0.96, 0.984 and 296, respectively, which meet the criteria. GFI, AGFI, CFI values must be from 0.90-1.00, therefore

appropriate and harmonious, and the Hoelter value of .05 significance must be greater than or equal to 200, which indicates Point out that the causal relationship factors, intention to use the GrabFood app are consistent with empirical data. Statistical values can be shown from factors corresponding to the empirical data as shown in Figure 3.



**Figure 3** Statistical values from the causal factors of the intention to use the food delivery service through a mobile application Foodpanda of consumers in Nonthaburi Province

## Discussion

The results of the study showed that exposure to experience directly influences the intentions of using the food delivery service through the mobile food panda application of consumers in Nonthaburi province. Since people who have used the food delivery service through the consumer panda mobile application in Nonthaburi Province believe that anyone can use the food delivery service through the consumer mobile food panda application. In Nonthaburi province Believe that they have a need to use the food delivery service through the mobile food panda application of consumers in Nonthaburi province for ordering food. And I think that I have a good experience in using the food delivery service through the mobile food panda application among consumers in Nonthaburi Province. This is the source of the experience of using a food delivery system through the GrabFood application for ordering food. It is consistent with Natchisa Leungsurong (2016) research that studied the relationship between five big personality traits and the purchase intention of reducing global warming products. The study found that experienced personality influences the willingness to purchase global warming products: consumers with an open personality are more open-minded and willing to embrace or comply with new ones. This is in line with the research of Sirikul Horsatitkul (2000) to study the demand for products and services through e-commerce systems of Internet users in Thailand. Found that consumers there were only 86 people who used to buy products and services via the Internet, which accounted for 25.7 percent of the type of products purchased online. This includes software, games, programs, books, magazines, and factors that influence product purchase decisions. Consumer services who have come to websites that sell products and services It was found that most of them put emphasis on the safety and reliability of the payment method, followed by the price display of the product. And services and displaying details of products and services complete with 3D pictures, sound effects as for the method of payment of the consumer. Who used to buy products and via the internet.

Exposure to the experience of using the food delivery service through the mobile food panda application of consumers in Nonthaburi Province Was directly influenced by consciousness Because consumers choose to order food through the mobile food panda application of consumers in Nonthaburi province. Only for restaurants that are responsible and honest in serving consumers. And believe that ordering food through the Panda mobile application of consumers in Nonthaburi Province will receive food that meets the promotion ordered as the source of consciousness This is consistent with Hirsh research (2010) that examines the relationship between consumer personality traits and their purchase of environmentally friendly products. The study found that Conscious personalities were positively correlated with exposure to the experience for purchasing eco-friendly products. And in accordance with the

research of Nattakarn Nikornpongsin (2000) to study opinions, satisfaction and trends of e-commerce entrepreneurs in Thailand. By using survey research methods (Survey Research) from the sample population. Using a questionnaire they are used for research and data collection tools. Data were analyzed by statistical methods. The sample population is 1,665 registered merchants in Thailand.

Which responses are collected the questionnaire was then analyzed and analyzed the results. And in line with warintip's research (2014). Decision Making Behavior of Niche Market of People in Muang District, Nakhon Pathom Province The objective of this time (1) is to study the buying behavior of Niche market among the people of Muang District. Nakhon Pathom Province and (2) to compare the level of purchasing behavior of Niche market among people in Muang District, Nakhon Pathom Province. Classified by personal characteristics by specifying the sample group, namely people living in the Muang district Nakhon Pathom Province, 395 persons. Data were collected by questionnaires. The data were analyzed by means of T-test and F-test. Results from the study were as follows: 1. Decision-making behavior in making purchase decision in Niche market among people of Muang District. Nakhon Pathom Province In overall and in each aspect at a high level the average score can be sorted from descending as follows: Productivity and Quality, Price, Physical Environment. Product aspect Process aspect Marketing promotion Distribution channels and personal, respectively. 2. Comparison of differences in product decision-making behavior, market niche of people in Muang District. Nakhon Pathom Province Classified by personal characteristics Found that the age and occupation are different decision making behavior in Niche market are different with statistical significance at the .05 level.

## **Suggestion**

### **Suggestions for applying research results**

The business operator of the food delivery service through the mobile food panda application for consumers in Nonthaburi province. Should take into account various factors Related to the behavior of intention to use the food delivery service through the mobile food panda application of the consumers in Nonthaburi province of the target customers, namely, the consciousness of the food delivery service through the mobile food panda application. of consumers in Nonthaburi Province The perception of the benefits of using the mobile food panda application of consumers in Nonthaburi province on the perception of the ease of use through the mobile food panda application of consumers in Nonthaburi Province and the experience of food delivery service through the mobile food panda application of consumers in Nonthaburi Province, especially those who operate the food delivery service through mobile food applications Consumers in Nonthaburi province should pay more attention to the experience

of food delivery service through the mobile food panda application of consumers in Nonthaburi province because it is a factor that encourages the intention of Using the food delivery service through the mobile application Foodpanda of consumers in Nonthaburi province as well.

**Suggestions for the next research**

Next research should introduce the conceptual framework of the intention to use the food delivery service through the mobile food panda application of consumers in Nonthaburi province. This proven track record applies to research on different food delivery applications. That is being provided in a similar format.

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