



(RESEARCH ARTICLE)



## Factors influencing the decision to buy fresh seafood online among Generation X consumers in Nakhon Si Thammarat Province, Thailand

Nipawan Kaewpu \*, Chonlakan Benjasak and Somnuk Aujirapongpan

*School of Accountancy and Finance, Walailak University, Nakorn Si Thammarat, 80160, Thailand.*

GSC Advanced Research and Reviews, 2023, 15(03), 110–120

Publication history: Received on 28 April 2023; revised on 10 June 2023; accepted on 12 June 2023

Article DOI: <https://doi.org/10.30574/gscarr.2023.15.3.0177>

### Abstract

The objectives of this study were to :1 (study the online purchase decision making behavior of consumers of Generation X in Nakhon Si Thammarat Province 2 (.To analyze factors influencing the decision to buy fresh seafood online of Generation X consumers in Nakhon Si Thammarat Province including online consumer behavior Online Marketing Mix )8Ps (and Technology Adoption .The sample group used in the study was Generation X consumers in Nakhon Si Thammarat Province which are people aged between 41 -56 years, amounting to 450 people using a questionnaire to collect data .The statistics used in the analysis consisted of Descriptive statistics were frequency, percentage, mean, standard deviation and inferential statistics, including t-test )Independent Sample t-test (F-Test )One Way ANOVA (and Multiple Regression Analysis. The results of the study showed that the behavior of consumers had channels to buy fresh seafood via Line application, which bought fresh seafood through online channels in a period of 1 month, amounting to 1 -2 times .The value of buying fresh seafood online is 501 -1,000 baht .Usually choose to buy fresh seafood online to bought squid .The factor that makes buying fresh seafood online is the promotion .Participants in the decision to buy fresh seafood online were family members and there is a way to pay by credit card .And the factors influencing the decision to buy fresh seafood online among Generation X consumers in Nakhon Si Thammarat Province Including 1 (. Online consumer behavior with an average of 4.07 It found that consumers felt more freedom when looking for fresh seafood when looking online was at the highest level, followed by the ability to receive news through online media and websites anywhere and at any time 2 (.Online Marketing Mix with an average of 4.03, it was found that the factor of productivity )Productivity (is at a high level When analyzed, it was found that Seafood can be stored for a long time without preservatives .was at the highest level, followed by the product factor )Product .(When analyzed, it was found that the shop has a wide variety of products to choose from such as shrimp, squid, fish, and crabs at a high level .3 (. Acceptance of technology with an average of 4.05, it was found that the ability to choose fresh seafood anywhere and anytime was at the highest level, followed by the ability to pay for goods or services through online channels .In addition, the study of demographic factors, namely education level, status, occupation and average monthly income . There are different influences on the decision to buy fresh seafood online among Generation X consumers in Nakhon Si Thammarat Province.

**Keyword** :Consumer Behavior; Online Marketing Mix; Fresh Seafood; Generation X

### 1. Introduction

Currently, with the growth of e-commerce and intense competition since the beginning of the year 2017, consumers have shown increased interest in purchasing products online. The changing times have led to transformations in the way goods are bought and sold, including attitudes and behaviors that vary over time and adapt to consumer society. One significant factor driving changes in e-commerce is the global spread of the coronavirus disease 2019 (COVID-19)

\* Corresponding author: Nipawan Kaewpu

that has influenced consumer attitudes and purchasing behaviors towards online channels. It has been observed that a group of consumers, particularly the Generation X, are more willing to pay higher prices for kitchen appliances and food ingredients when purchasing through online platforms. Generation X, predominantly aged between 41 and 56 years, has shown an increased preference for cooking, affecting the market for kitchen appliances and food ingredients that has grown alongside this consumer group. Additionally, Thailand possesses favorable geographical conditions for fishing, which is vital to the country's economy as a source of domestic consumption and exports. The current economic situation in Thailand is projected to expand by an average of 3.4%, driven by government stimulus measures that boost public spending. This has led to the recovery of businesses, and consequently, consumer behavior has adapted to these changes.

Therefore, the researcher recognizes that currently, the consumption of fresh seafood online has gained popularity among seafood consumers, particularly the Generation X group. This consumer group places importance on selecting and purchasing food products and ingredients online, and they tend to be the household decision-makers who prioritize standardized products and ingredients. According to a survey conducted by Spring News in the year 2021, the Thai population aged between 41 and 56 years, belonging to the Generation X group, amounts to a total of 16.4 million people. Data from the Nakhon Si Thammarat Provincial Local Government Promotion Office in the year 2021 revealed that the province of Nakhon Si Thammarat has a total population of 1,549,344 people, of which 255,342 individuals belong to the Generation X group, accounting for 16.40% of the population in the province (Nakhon Si Thammarat Provincial Local Government Promotion Office, 2021).

Based on the above, the researcher is interested in studying the factors that influence the purchasing decision of online fresh seafood among Generation X consumers in Nakhon Si Thammarat province. This information will be valuable for current online seafood sellers or individuals interested in establishing an online business for selling fresh seafood in the future. The research objectives are as follows: 1. To investigate the purchasing behavior of online fresh seafood among Generation X consumers, and 2. To analyze the factors that influence the purchasing decision of online fresh seafood among Generation X consumers in Nakhon Si Thammarat province.

---

## 2. Literature Review

In reviewing the literature, it was found that there are several factors that influence the purchasing decision of online fresh seafood among Generation X consumers in Nakhon Si Thammarat province. The researcher summarized these factors from three theories, namely consumer behavior theory, online consumer behavior theory, and the marketing mix theory (8Ps). Additionally, the researcher identified three conceptual frameworks, including the technology acceptance framework, the decision-making framework, and the demographic segmentation and age grouping framework.

The first theory, derived from consumer behavior theory, indicates that it is a process or behavior of decision-making in purchasing, usage, and evaluation of products or services by individuals, which is crucial for the survival of organizations in both the present and the future. Therefore, it is important to study consumer behavior by understanding the meaning and roles of individuals, including customers, consumers, expectants, and buyers (Chatayaporn Samerjai, 2007).

The second theory is about online consumer behavior, which recognizes that humans are living organisms with stimuli and responses. It consists of five components. The online relationship is related to the characteristics of website usage, including (1) online perception, (2) online emotions, (3) online entertainment, (4) online continuity, and (5) attitudes towards online platforms (Richard & Chebet, 2016).

The third theory is the marketing mix theory (8Ps), which is a composite of the marketing mix for service businesses. To achieve effectiveness, all 8 components of the service or 8Ps need to work together harmoniously. These components include (1) Product, (2) Price, (3) Place, (4) Promotion, (5) People, (6) Process, (7) Physical Evidence, and (8) Productivity (Marketing Tech Thailand, 2021).

The first conceptual framework is the acceptance of technology. Chu & Chu (2011) defined it as the process by which humans learn and understand technology, leading to its acceptance and adoption in daily life. The important factors can be categorized into six factors, including (1) Perceived Usefulness, (2) Perceived Ease of Use, (3) Perceived Risk, (4) Intention to Use, (5) Attitude toward Using, and (6) Actual Use. From these factors, the researcher focused on three main topics: perceived ease of use, perceived risk, and perceived usefulness (Chu & Chu, 2011).

The second conceptual framework is about the decision-making process in purchasing, which consists of five sequential steps: (1) Problem or Need Recognition, (2) Search for Information, (3) Evaluation of Alternatives, (4) Decision Making, and (5) Post-purchase Behavior (Siriwan Serirat et al., 1998).

The third conceptual framework is about demographics and age segmentation. Demographics, including gender, age, marital status, education level, occupation, and income, are important criteria used to divide the market. Demographic characteristics play a significant role in determining target markets. Key demographic variables include (1) Age, (2) Sex, (3) Marital Status, and (4) Income, Education, and Occupation (Siriwan Sereerat, 1995).

By studying these theories and related concepts from the literature review, they provide a framework for conducting research on the factors influencing the decision-making process in the online purchase of fresh seafood among Generation X consumers in Nakhon Si Thammarat province.

---

### 3. Research Methodology

The population studied in this research is Generation X consumers who purchase seafood online in Nakhon Si Thammarat province. Generation X refers to individuals aged between 41-56 years. The total population within this age range in Nakhon Si Thammarat province is 255,342 people (Nakhon Si Thammarat Provincial Local Government Promotion Office, 2021). The sample size was determined using the Roscoe formula (1969), resulting in a sample of 450 individuals. Purposive sampling was used to select the sample group.

The research instrument utilized in this study is a questionnaire administered online. The questionnaire was developed based on data and concepts gathered from the literature review to ensure its content relevance and coverage. The initial version of the questionnaire was reviewed and modified by three advisors to enhance its appropriateness. The questionnaire's content validity was analyzed by calculating the Index of Content Validity (IOC) for each item, with items scoring 0.50 or higher being considered valid. The questionnaire's internal consistency was assessed using item-total correlation and Cronbach's alpha coefficient ( $\alpha$ ). A minimum value of 0.80 for Cronbach's alpha was set as the threshold for questionnaire reliability.

Descriptive statistics, such as frequencies, percentages, mean, standard deviation, and inferential statistics, were employed to analyze the collected data. Statistical techniques used in this study include independent sample t-test, one-way ANOVA (F-test), and multiple regression analysis to analyze the relationships among variables.

---

### 4. Results

From the sample group of 450 individuals, consisting of an equal number of male and female respondents, the following general data analysis of Generation X consumers in Nakhon Si Thammarat province was conducted:

- Gender: Out of the 450 respondents, 225 were male (50.0%) and 225 were female (50.0%).
- Age: Among the respondents, 162 individuals (36.0%) were between the ages of 51 and 56.
- Education: A total of 180 respondents (40.0%) had a bachelor's degree or higher.
- Occupation: 118 individuals (26.2%) were employed in corporate/business organizations.
- Marital Status: 274 respondents (60.9%) were married.
- Number of Children: 193 respondents (42.9%) had two children.
- Average Monthly Income: 145 individuals (32.1%) had an average monthly income ranging from 10,001 to 15,000 Baht.

#### 4.1. Analysis of the Purchasing Behavior of Fresh Seafood through Online Channels among Generation X Consumers in Nakhon Si Thammarat Province

The study findings are presented in the following table:

**Table 1** Frequency and percentage of data regarding the purchasing behavior of fresh seafood through online channels among Generation X consumers in Nakhon Si Thammarat Province

	<b>Purchasing Behavior of Fresh Seafood through Online Channels among Generation X Consumers in Nakhon Si Thammarat Province</b>	<b>quantity</b>	<b>percentage</b>
1	Online channels used for purchasing: Line application (Line)	226	50.2
2	Number of times purchasing fresh seafood through online channels in a one-month period:1- 2times per month	226	50.2
3	Value of each purchase of fresh seafood through online channels: 501-1, 000Baht	219	48.7
4	Types of fresh seafood selected for purchase through online channels: Squid	236	52.4
5	Factors influencing the decision to purchase fresh seafood through online channels: Promotion and discount offers	255	56.7
6	Involvement in the decision to purchase fresh seafood through online channels: Family members	289	64.2
7	Payment methods used for purchasing fresh seafood through online channels: Credit card	245	54.5

According to Table 1, the purchasing behavior of Generation X consumers in Nakhon Si Thammarat regarding buying fresh seafood through online channels reveals the following findings. The majority of consumers primarily use the Line application for the service. They order seafood 1-2 times within a one-month period, with each purchase averaging between 501-1,000 Baht. Squid is the most commonly selected type of seafood. The promotional offers play a significant role in their decision-making process for purchasing seafood online, and family members have involvement in the decision-making process. Credit cards are the preferred method of payment.

**4.2. The analysis of online consumer behavior study shows the following results:**

**Table 2** Mean and standard deviation of data related to online consumer behavior

<b>Online Consumer Behavior Analysis</b>	<b><math>\bar{X}</math></b>	<b>S.D.</b>	<b>Interpretation</b>
Online Perception:	4.17	0.51	High
Online Mood:	4.12	0.63	High
Online Entertainment:	3.91	0.48	High
Overall	4.07	0.54	High

From Table 2, it is found that the overall perception of online consumer behavior is at a high level (" $\bar{X}$  = 4.07"). When segmented into specific aspects, it is observed that online awareness is at a high level (" $\bar{X}$  = 4.17"), followed by online mood/emotion at a high level (" $\bar{X}$  = 4.12"), and online entertainment at a high level (" $\bar{X}$  = 3.91"), respectively.

**4.3. The analysis of the online marketing mix**

The following results in Table 3, including the average values and standard deviations of the data.

According to Table 3, regarding the components of online marketing (8Ps), it is found that consumers generally have a high overall perception of the components of online marketing (8Ps) ( $\bar{X}$  = 4.03). When categorized by specific aspects, it is observed that the factor of productivity (Productivity) is rated highly ( $\bar{X}$  = 4.15), followed by the factor of product (Product) which is also rated highly ( $\bar{X}$  = 4.10), and the factor of distribution channels (Place) which is rated highly ( $\bar{X}$  =

4.06). The factor of marketing promotion (Promotion) is rated at a high level ( $\bar{X} = 4.01$ ), as well as the factor of processes (Process) ( $\bar{X} = 4.01$ ). The factor of personnel (Personal) is rated at a slightly lower level ( $\bar{X} = 3.99$ ), along with the factor of price (Price) ( $\bar{X} = 3.99$ ). The factor of physical appearance (Physical Evidence) is rated at a slightly lower level ( $\bar{X} = 3.91$ ).

**Table 3** Average and Standard Deviation of the Data on the Online Marketing Mix (8Ps)

Online marketing mix (8Ps)	$\bar{X}$	S.D.	Interpretation
Factors related to the product (Product)	4.10	0.562	High
Factors related to pricing (Price)	3.99	0.516	High
Factors related to distribution channels (Place)	4.06	0.580	High
Factors related to marketing promotion (Promotion)	4.01	0.524	High
Factors related to personnel (Personal)	3.99	0.500	High
Factors related to processes (Process)	4.01	0.516	High
Factors related to physical appearance (Physical Evidence)	3.91	0.543	High
Factors related to productivity (Productivity)	4.15	0.569	High
Overall	4.03	0.539	High

#### 4.4. The analysis of data regarding technology acceptance shows the following results:

**Table 4** Average values and standard deviations of the data related to technology acceptance

Technology Acceptance	$\bar{X}$	S.D.	Interpretation
Perceived Benefits	4.03	0.42	High
Perceived Ease of Use	4.14	0.69	High
Perceived Risks	3.94	0.58	High
Overall	4.04	0.57	High

From Table 4, it is found that the overall perception of technology acceptance among consumers is high ( $\bar{X} = 4.04$ ). When examining individual factors, it is observed that perceived ease of use is high ( $\bar{X} = 4.14$ ), followed by perceived benefits ( $\bar{X} = 4.03$ ), and perceived risks ( $\bar{X} = 3.94$ ).

#### 4.5. Analysis of Factors Influencing the Decision to Purchase Fresh Seafood

Online by Generation X Consumers in Nakhon Si Thammarat Province reveals the following:

- Online Consumer Behavior: The average score is 4.07, indicating that consumers feel empowered to explore fresh seafood options when using online channels to gather information. The highest-rated aspect is the freedom to choose and browse fresh seafood online ( $\bar{X} = 4.29$ ). Additionally, consumers perceive that they can access seafood-related news through online media and websites anytime and anywhere ( $\bar{X} = 4.23$ ).
- Online Marketing Mix: The average score is 4.03. The productivity factor (" $\bar{X} = 4.15$ ") is highly rated, indicating that fresh seafood can be preserved without the addition of harmful substances. The highest-rated aspect is the range of seafood products available for consumption, such as shrimp, squid, fish, and crab ( $\bar{X} = 4.19$ ).
- Technology Acceptance: The average score is 4.05. The highest-rated aspect is the ability to choose fresh seafood from anywhere and at any time ( $\bar{X} = 4.27$ ). The second-highest aspect is the ability to make online payments for purchases ( $\bar{X} = 4.19$ ).

#### 4.6. Hypothesis testing

##### 4.6.1. Hypothesis 1

Demographic factors such as gender, age, marital status, number of children, education level, occupation, and income have an influence on the purchasing decision of online fresh seafood among Generation X consumers in Nakhon Si Thammarat province, and these factors vary among individuals.

**Table 5** Results of Independent Sample t-test Analysis for Demographic Factors of Gender and Number of Children

<b>Decision-making for online purchase of fresh seafood among Generation X consumers in Nakhon Si Thammarat Province.</b>			
Demographic Factors:	t	df	Sig.
Gender	0.879	448	0.380
Number of Children	0.741	448	0.459

From Table 5, the results of the t-test (Independent Sample t-test) analysis for the demographic factors of gender and number of children show that the gender variable has a Sig. value of 0.380, and the number of children variable has a Sig. value of 0.459. These values are greater than 0.05, indicating that the null hypothesis cannot be rejected. Therefore, it can be concluded that the demographic factors of gender and number of children do not significantly influence the decision to purchase fresh seafood online among Generation X consumers in Nakhon Si Thammarat province.

**Table 6** Results of the analysis of variance (ANOVA) using the One-Way ANOVA test for the demographic factors of age, marital status, education level, occupation, and income

<b>Decision-making for online purchase of fresh seafood among Generation X consumers in Nakhon Si Thammarat Province.</b>		SS	Df	MS	f	Sig.
Age	Between Groups	0.173	2	0.087	0.769	0.464
	Within Groups	50.262	447	0.112		
	Total	50.435	449			
Marital Status	Between Groups	0.673	2	0.336	3.023	0.050*
	Within Groups	49.762	447	0.111		
	Total	50.435	449			
Education	Between Groups	5.149	4	1.287	12.650	0.000*
	Within Groups	45.285	445	0.102		
	Total	50.435	449			
Occupation	Between Groups	2.705	4	0.676	6.306	0.000*
	Within Groups	47.730	445	0.107		
	Total	50.435	449			
Income	Between Groups	10.551	5	2.110	23.492	0.000*
	Within Groups	39.884	444	0.090		
	Total	50.435	449			

\*Statistical significance at .05 level

From Table 6, the results of the One-Way ANOVA (F-test) analysis for the factors of age, marital status, education level, occupation, and income show that the factors of marital status (sig. = 0.050\*), education level (sig. = 0.000\*), occupation (sig. = 0.000\*), and income (sig. = 0.000\*) significantly differ. This indicates that these demographic factors have a significant influence on the decision to purchase fresh seafood online among Generation X consumers in Nakhon Si Thammarat province, with a significance level of 0.05. However, the factor of age (sig. = 0.464) does not significantly differ and does not have a significant influence on the decision to purchase fresh seafood online among Generation X consumers in Nakhon Si Thammarat province.

4.6.2. Hypothesis 2

Online consumer behavior influences the decision to purchase fresh seafood products online among Generation X consumers in Nakhon Si Thammarat province.

**Table 7** Results of Multiple Regression Analysis on Online Consumer Behavior

Factors	B	SE	Beta	t	Sig.
Constant term (constant)	3.236	.211	-	15.349	0.000*
Online perception (X1)	-0.075	0.036	-0.100	-2.067	0.039*
Online emotions (X2)	0.076	0.036	0.104	2.110	0.035*
Online entertainment (X3)	0.218	0.046	0.245	4.701	0.000*
R square =0.084 F =13.567 Sig =0.000*					

\*Statistical significance at .05level

Table 7 presents the results of the Multiple Regression Analysis for online consumer behavior. It is found that online consumer behavior, including online perception, online emotions, and online entertainment, significantly influences the decision to purchase fresh seafood online among Generation X consumers in Nakhon Si Thammarat province, with a statistical significance level of 0.05. The regression coefficients indicate that the predicted regression equation is as follows:  $y = 3.236 - 0.075(x_1) + 0.076(x_2) + 0.218(x_3)$ . The coefficient of determination (R square) is 0.084, indicating that approximately 8.4% of the variance in the dependent variable can be explained by the independent variables.

4.6.3. Hypothesis 3

The components of online marketing (8 Ps) have an influence on the decision to purchase fresh seafood online among Generation X consumers in Nakhon Si Thammarat province.

**Table 8** Results of the Multiple Regression Analysis for the components of online marketing mix

Factors	B	SE	Beta	t	Sig.
Constant (Intercept)	0.374	0.093	-	4.027	0.000
Product factor (X1)	0.390	0.035	0.436	11.215	0.000*
Price factor (X2)	0.167	0.036	0.177	4.610	0.000*
Distribution channel factor (X3)	0.142	0.028	0.198	5.057	0.000*
Promotion factor (X4)	-0.137	0.032	-0.154	-4.253	0.000*
Personal factor (X5)	0.191	0.041	0.205	4.719	0.000*
Process factor (X6)	0.066	0.031	0.070	2.155	0.032*
Physical Evidence factor (X7)	0.081	0.029	0.091	2.813	0.005*
Productivity factor (X8)	0.019	0.037	0.024	0.504	0.614
R square = 0.810 F = 235.480 Sig =0.000*					

\*Statistical significance at .05level

$$\hat{Y}_0 = . +3740.390)X_1 +(0.167)X_2 +(0.142)X_3 -(0.137)X_4 + (0.191)X_5 +(0.066)X_6 +(0.081)X_7($$

From Table 8, the results of the Multiple Regression Analysis on the online marketing mix (8Ps) indicate that the factors: Product, Price, Distribution Channel, Promotion, Personal, Process, and Physical Evidence have a significant influence on the purchasing decisions of online fresh seafood consumers in the Generation X group in Nakhon Si Thammarat province, with a statistical significance level of 0.05. The regression analysis yields a coefficient of determination (R square) of 0.810, indicating a strong relationship. The regression equation can be written as follows:

$$Y = 0.374 + 0.390(X_1) + 0.167(X_2) + 0.142(X_3) - 0.137(X_4) + 0.191(X_5) + 0.066(X_6) + 0.081(X_7)$$

#### 4.6.4. Hypothesis 4

States that the acceptance of technology influences the decision to purchase fresh seafood online among Generation X consumers in Nakhon Si Thammarat province.

**Table 9** The results of the Multiple Regression Analysis for the acceptance of technology.

Factors	B	SE	Beta	t	Sig.
Constant (Intercept)	0.470	0.089	-	5.300	0.000*
Perceived Benefits (X1)	0.369	0.021	0.409	17.259	0.000*
Perceived Ease of Use (X2)	0.228	0.014	0.358	15.854	0.000*
Perceived Risk (X3)	0.303	0.017	0.431	17.976	0.000*
R square =0.798 F =588.921 Sig =0.000*					

\*Statistical significance at .05level

The multiple regression analysis of technology acceptance, as shown in Table 9, reveals that perceived benefits, perceived ease of use, and perceived risk significantly influence the purchasing decision of online fresh seafood among Generation X consumers in Nakhon Si Thammarat province. The statistical analysis at a significance level of 0.05 yields a coefficient of determination (R-square) of 0.798, indicating a substantial impact. The regression equation can be written as follows:

$$Y = 0.470 + 0.369(X_1) + 0.228(X_2) + 0.303(X_3)$$

## 5. Discussion

Based on the study findings regarding the factors influencing the purchasing decisions of Generation X consumers in Nakhon Si Thammarat province regarding online fresh seafood, the following strategic recommendations can be proposed for seafood businesses operating online. These recommendations aim to utilize the data to inform business strategies, development initiatives, service improvements, and stimulate consumer demand to meet their true needs. The recommendations are as follows:

### 5.1. Demographic Factors

Demographic factors such as education level, occupation, social status, and income have an impact on the purchasing decisions of Generation X consumers. Therefore, it is crucial for businesses to use strategies that focus on discovering the truth about consumer preferences and understanding their desires and thought processes.

### 5.2. Online Consumer Behavior

Businesses should employ strategies that emphasize the creation of interesting online purchasing channels. For example, incorporating reviews and hashtags as a means of distributing compelling information. Customers can provide reviews on social media, and sellers may use store or product-specific hashtags to facilitate reviews and searches. This will help stimulate consumer engagement and consumption.



### **5.3. Online Marketing Mix (8Ps):**

In terms of the online marketing mix (8Ps), the following factors have an influence on the purchasing decisions of Generation X consumers in Nakhon Si Thammarat:

#### *5.3.1. Product*

Product strategy plays a vital role in the decision-making process, considering all aspects related to the product. Businesses should focus on packaging and presenting fresh seafood products attractively and ensuring their durability.

#### *5.3.2. Price*

Price determination is a crucial marketing strategy that can significantly enhance competitiveness. Businesses should adopt pricing strategies that are appropriate for the quality of fresh seafood products, offering a range of price levels to cater to different consumer segments.

#### *5.3.3. Place*

Distribution channel strategy is a key marketing tactic that helps reach more consumers and maximize profits. Businesses should have an online distribution channel that covers a wide range of areas to effectively reach consumers.

#### *5.3.4. Promotion*

The promotion strategy should be aligned and integrated with other strategies. Business owners should use media and advertising to promote their online seafood business, making it attractive and easy to find. Continuous efforts should be made to promote sales.

#### *5.3.5. Personal*

The personal strategy can facilitate the sale of fresh seafood by ensuring that staff members are responsive to customers 24/7, have a good understanding of the seafood products, and offer online seafood sales through a platform that operates 24 hours a day, with constant store management.

#### *5.3.6. Process*

A convenient and easy process strategy will make it easier for consumers to make repeat purchases. Therefore, business owners should provide services that are convenient and efficient in each step, including a payment process that accurately calculates the total amount for the products and delivery fees, ensuring correct and error-free transactions.

#### *5.3.7. Physical Evidence*

The physical evidence strategy creates trust and confidence in the quality of fresh seafood for online seafood retailers.

#### *5.3.8. Productivity*

The productivity strategy aims to enhance the efficiency of seafood products. Business owners should prioritize seafood that is odorless, free from harmful substances, and safe for consumers of all ages.

#### *5.3.9. Embracing Technology*

Business owners should employ strategies that embrace technology to enhance convenience for consumers. This can include designing user-friendly and convenient online purchasing systems and offering various payment options.

### *Recommendations*

- In the next study, it is recommended to expand the scope of research within the same topic of the factors influencing the purchasing decision of Generation X consumers in Nakhon Si Thammarat for online fresh seafood. Additional qualitative research methods, such as in-depth interviews, should be included to gain insights and opinions that can contribute to the development of a higher quality business.
- The next study can explore other factors that influence the purchasing decision of Generation X consumers in Nakhon Si Thammarat for online fresh seafood. Considering the diverse behaviors and hidden factors that influence consumer choices in the present era, it would be beneficial to investigate various additional factors to have a more comprehensive understanding. This will facilitate the development of strategies and maximize the outcomes.

- For the next study, it is suggested to change the sample group and location. For example, collecting samples from different provinces can provide comparative analysis of similarities and differences that may not be known. This will enable online seafood retailers to have access to broader information and understand the purchasing behaviors of the population in different areas. It will also allow for the identification and improvement of management systems that are not aligned with the online purchasing behaviors of fresh seafood in each specific area.

#### *Limitations of the study*

- The study focused specifically on the age group of Generation X consumers, which resulted in data collection only from individuals within the age range of 41-56 years old. Therefore, the analysis and findings from the questionnaire may not represent the views and opinions of consumers in all age groups.
- The study identified an additional suggestion related to consumer trust based on reading product reviews from previous online seafood buyers. Therefore, it is recommended that businesses provide channels for customers who have purchased online fresh seafood to review and share their experiences. Customer reviews are considered a significant factor in establishing trust for online seafood sellers, as the content and information from actual users carry more weight than other forms of advertising.

---

## **6. Conclusion**

The research on factors influencing the purchase decision of fresh online seafood among Generation X consumers this time, enabling strategic recommendations for seafood business owners regarding fresh seafood, especially using online distribution channels. This current trend provides quick access to consumer needs and cost savings, particularly for Generation X consumers. It helps small-scale entrepreneurs with limited investment to define marketing strategies for competitive advantage.

---

## **Compliance with ethical standards**

### *Acknowledgments*

The authors would like to express our heartfelt gratitude to the Board of Innovation Management and Business Development Program, School of Accountancy and Finance, Walailak University, Thailand.

### *Disclosure of conflict of interest*

The authors declare that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

---

## **References**

- [1] Bunyanuch Boonchalermrat (2017). Marketing mix affecting the decision to buy frozen Seafood of consumers in the municipal district Ubon Ratchathani Province (Master of Administration Program, Ubon Ratchathani University)
- [2] Chatyaporn Samerjai. (2007). The Meaning of Consumer Behavior. Retrieved May 15,2022, from <http://dspace.bu.ac.th/bitstream/123456789/1223/1/tanut.sukw.pdf>
- [3] Chu, A.Z-C., & Chu, R.J-C. (2011). The intranet's role in newcomer socialization in hotel industry in Taiwan-technology acceptance model analysis. The International Journal of Human Resource Management.
- [4] Foreign Fisheries Division, Department of Fisheries, Ministry of Agriculture and Cooperatives.(2023) resource management Sea fishing under climate change in the 21st century.Retrieved January 31,2022, from <https://www4.fisheries.go.th>
- [5] Marketing Tech Thailand. (2021). Marketing Mix Theory (8Ps). Retrieved August 2, 2022,from <https://imagesseed.com/ws/Storage/PDF/885916/100/8859161008613PDF.pdf>
- [6] Nalika Mulgate, Kulapha Kundilok and Wisit Limsomboonchai. (2022). Seafood Consumer Behavior.via online During the outbreak of COVID 19 in the South. (Agribusiness program Faculty of Economics, Kasetsart University)

- [7] Natthanan Phithiwatthotikul (2017). Online Consumer Behavior. Retrieved August 31, 2022, from [http://dspace.bu.ac.th/bitstream/123456789/2499/1/natthanun\\_pith.pdf](http://dspace.bu.ac.th/bitstream/123456789/2499/1/natthanun_pith.pdf)
- [8] Nakhon Si Thammarat Provincial Local Government Promotion Office. (2021). Age range of the Generation X population in Nakhon Si Thammarat Province. Retrieved August 31, 2022, from <https://www.nakhonlocal.go.th/index.html>
- [9] Parichart Panyaprachum and Kanchana Hinthaow. (2022). Technology acceptance and behavior. Online consumers that influence Gen's online healthy coffee purchase decisions X in Thailand. (Business Administration and Digital Innovation Faculty of Accounting and Management, Mahasarakham University)
- [10] Penpiccha Sombatcharoenmuang. (2021). Study of Behavior and Factors Affecting Purchasing Decisions. Dietary supplements via Application Shopee for Gen X consumers and Gen Y. (Master of Management Degree, School of Management, Mahidol University)
- [11] Singha Chaweesuk and Sunanta Wongchaturaphat. (2012). The Concept of Technology Acceptance. Retrieved on August 2, 2022, from [http://dspace.bu.ac.th/bitstream/123456789/2318/1/narumon\\_pany.pdf](http://dspace.bu.ac.th/bitstream/123456789/2318/1/narumon_pany.pdf)
- [12] Siriwan Sereerat. (1995). Demographic characteristics. (Demographic). Retrieved 16 May, 2022, from [http://thesis.swu.ac.th/swuthesis/Mark/Piyanut\\_A.pdf](http://thesis.swu.ac.th/swuthesis/Mark/Piyanut_A.pdf)
- [13] Siriwan Serirat et al. (1998). Steps in consumer decision making. Retrieved June 20, , 2022, from <https://doctemple.wordpress.com>.
- [14] Springnews. (2022). Number of Generation x population in Thailand. . Retrieved on January 31, 2022, from <https://www.springnews.co.th/>
- [15] Richard, M.O., & Chebat, J.C. (2016). Modeling online consumer behavior: Preeminence of emotions and moderating influences of need for cognition and optimal stimulation level. *Journal of Business Research*
- [16] Roscoe, J.T. (1969). *Fundamental Research Statistics for the Behavioral Sciences*. New York : Rinehart and Winston