Confidence and trust in online shopping decisions of agriculture product for elderly people in Thailand

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Abstract. The purpose of this research was to explore the confidence and trust affecting online shopping decisions of agriculture product for elderly people in Thailand. This research is a quantitative study in which data were collected from questionnaires given to respondents, who were 378 elderly people aged 51-65 years, living in Muang District, Nakhon Sawan Province. The data were then analyzed using Multiple Regression Analysis. The results showed that confidence and trust had a statistically significant effect on the elderly's online shopping decisions. Trust was found to be the most influential factor, followed by the elderly’s confidence in making online shopping decisions. Keywords: Agriculture Product, Confidence and Trust, Elderly People, Online Shopping Decision, Online Business Operator.

1 Introduction

In recent years, the demographic structure of Thailand has seen a transition towards that of an Aged Society with a rise in population aged 60 years or older. The population projection of the Office of the National Economic and Social Development Board (NESDB) estimated that Thailand would become a Completely Aged Society by 2021 (Office of the National Economic and Social Development Council, 2019). In the latest survey results, the majority of internet usage was for social media, e-mail, search for information, entertainment (listening to music and watching films), and shopping. The fifth category only recently reached this rank in the previous year’s survey and maintained its rank in this latest survey with an increase in popularity. This shows that in addition to entertainment purposes, Thai people also use the internet for economic purposes. It was also found that almost every activity was being conducted online first and foremost, before offline options to provide convenience in participation. Online social media platforms Line and YouTube were also found to be the most used among the elderly, important information to consider in online marketing (Ann, & Noor, 2022). Online media have also taken an important role in informing people of news, activities, and social changes. In trade, the use of online media has expanded the market with aims to increase efficiency and reduce the costs of doing business. As a result, there is an emergence of a new type of business operating by combining online media with the sales of products and services, which can quickly deliver goods and services to consumers. Even though elderly people will become the largest population within a few
years, Thai society still seems unprepared for elderly care. Leaving elderly people at home to watch television and providing them with food and healthcare may not be enough in an era where new media are emerging every day, including hundreds of satellite TV channels and radio stations. Allowing the elderly to use these media as companions must be considered appropriately as there could be many potential negative effects. Online media are accessible to almost every family in Thailand, as they are inexpensive and easy to consume, resulting in a form of media that is very close to consumers. Although overall online media are well-controlled, problems still arise with some online media where products are advertised daily, boasting exaggerated qualities. When the elderly listen to or follow these media for a long time, they develop subconscious beliefs in these advertisements. Consequently, they result in confidence, trust, and eventually purchase decisions of agriculture product.

Confidence and trust have also been found to be the most important factors that lead to customer purchasing decisions agriculture product. (Ismajli, Mustafa, Velijaj, & Dobrunaj, 2022). From the aforementioned increase in elderly population, marketers may shift their focus to target these senior consumers more as they become a large group with purchasing power and potential consumption. Therefore, the researcher was interested to explore the confidence and trust of elderly people in Thailand towards their online shopping decisions. To find the answers, necessary data must be collected from elderly consumers. The results found in this study should be of use for e-commerce businesses in developing suitable systems and formulating marketing strategies to appropriately target elderly consumers in the future.

2 Literature review

2.1 Confidence and Trust Concepts

From the literature review (Chen, 2022) was found to have conducted a study on confidence between leaders and their personnel. Several elements were found to create confidence and trust among the people. Examples of these elements include (1) Congruence, referring to how/when people keep their word and do what they have promised, (2) Consistency, referring to people's consistency in words and actions which contributes to the credibility of a person, affirming their ability to use good judgment in various situations, and (3) Caring, referring to care and attention towards corporate customers. The majority of vendors who customers have confidence in have been found to have these important attributes – (1) Integrity, referring to being honest, adhering to ethics and morality, being proficient in work, being able to make good decisions, and complying with their roles and duties, (2) Consistency, referring to being reliable with clear guidelines for practice, being able to predict events in advance, making decisions carefully, and making good decisions in each situation, and (3) Willingness, referring to willingness to sell their products and having sufficient information in their sales.

Al Asheq, Tanchi., Akhter, Kamruzzaman, & Islam, 2022) have given a definition of trust as a person's feelings and actions that demonstrate their confidence, belief, and support for individuals and organizations – a reflection of belief and loyalty that a person feels towards the characteristics and abilities of another party.

This is in line with Sari, Ramelan, Safitri, & Inas, (2022) who stated that certain qualities are required in service providers for customers to have trust in them. (1) They must treat customers with integrity, selling products or services at fair prices and under a profit structure appropriate to the quality of products and services they provide. They should also keep promises with customers as agreed in terms of quality, quantity, price, and conditions of responsibility. (2) They must have the ability to manage problems and come up with a solution to the cause of the problems. They should be able to find these solutions by studying
methods from various sources of knowledge. (3) They must be ready for business changes and be able to adapt to changing environments or new opportunities. They should be ready to meet the needs of consumers that vary and differ in each area, requiring a variety of adaptation methods depending on the market. To have the trust of customers in different groups or areas, service providers must treat them with honesty, have the ability to manage problems, and be ready for business changes.

It can be concluded that customers’ confidence in making online shopping decisions is associated with online business operators’ professionalism, shipments, product exchanges, and the products being delivered as ordered. Other points include availability of refund guarantee, variety of products, secure payment systems, and privacy protection for customers’ information. Customers’ trust in making online shopping decisions has been found to be associated with online business operators providing useful and complete information and building customer trust which leads to repeated purchases. Other points include providing service with consistent standards, being ethical, taking responsibility when there are issues, and building a good relationship with customers in the long term.

2.2 Purchase decisions and buying behaviour

Buraczyńska, Żelazna, & Bojanowska, (2022) explained the definition of purchase decisions and buying behavior as when a person chooses to do certain things from among the choices available. This is how consumers make decisions, by relying on their intrinsic factors: motivation, perception, learning, personality, and attitude – all of which reflect their needs and awareness of the wide variety of products and consumer activities that is relevant to information perceived by the consumers or provided by the manufacturers. The consumers will then evaluate all the options available. The purchasing decision process can be divided into several steps, beginning with (1.1) searching for information through various media or by talking with friends, family, salespeople, or others who can provide advice. The more information consumers have about a product or service, the better they know what to expect and the lower risk they will take. (1.2) Some customers tend to use the same products that they have used before and have been satisfied with. (1.3) If consumers have no experience with a product, they tend to trust well-known products that they have heard of, which is a reason why marketers focus greatly on creating a good image for their brand. (1.4) If consumers have no information about the product at all, they usually trust the selection of products from reputable stores. The image of retailers is therefore important to purchasing decisions as well. (1.5) When in a must-buy situation, consumers often believe they should buy high-end brands as they expect that more expensive products must have better quality. (1.6) Consumers also look for other guarantees such as refund guarantees when the product is not satisfactory, quality certifications from reliable government agencies or private agencies, and being able to try that product or service before purchasing. This is also consistent with Nori, Zucchelli, Piccardi, Palmiero, Bocchi, & Guariglia, (2022) who conducted the study “Online Shopping Factor and Website Quality Affecting Decision to Purchase Products via Lazada of Consumers in Bangkok”. Website quality was found to be the factor affecting the decision to buy products on Lazada the most for consumers in Bangkok. Therefore, e-commerce operators or those who do business through social media should pay attention to choosing a website for online shopping and sales of quality products. Although many electronic commerce websites have emerged in recent years, these websites can have different advantages and disadvantages. Development of quality websites with comprehensive and easy-to-use elements for both buying and selling can help consumers search for the products they want and buy them quickly and easily. In addition, e-commerce operators should also place importance on consumer personal data protection, ease of use, accurate navigation systems, and various payment options.
2.3 Elderly people’s confidence and trust in online shopping decisions

Isbel, Mulhall, & Gibson, (2022) has explored factors affecting the decisions of elderly people in Nakhon Sawan Province to buy products through digital technology. The study results found that social media and social networking websites provide opportunities for seniors to create a new society and meet new friends, as well as share information amongst their peers. This was found to result in online shopping decisions and product trials at a statistically significant level. This is in line with Chaloemsak Boonprasert (2017) in the study “Factors Influencing the Adoption of LINE Application Using for Elderly Users” which found that talking with close friends on social media or the Line application was the most influential factor towards the perception of usefulness of the LINE application, resulting in decisions to buy products. It was followed by the entertainment factor in the use of the LINE application and the convenience factor in the use of the LINE application respectively. This corresponds with Chakraborty, Vishik, & Rao, (2013) who explored marketing factors on purchases of supplementary foods by elderly people in Pathum Thani Province. The sample elderly population was found to accept mobile phone technology in terms of perceptions of compatibility, security risks, and trust. Social media marketing in terms of word of mouth communication via electronic media was also found to have a significant impact on the elderly's intent to shop via online applications. This is also in line with the work of Lee, Shi, Cheung, Lim, & Sia, (2011) which explored purchase decisions and opportunities to purchase clothing and footwear of elderly customers in Thailand. The results showed that the factors most influential to the decision to shop online via an e-marketplace for elderly customers were confidence and trust, product, brand loyalty factors, product variety, price, marketing promotion and provision of information, promotion news, privacy protection and personal service, brand awareness, and product benefits and bargaining factors, respectively.

Fig. 1. Conceptual Framework Confidence and Trust in Online Shopping Decisions of agriculture product for Elderly People in Thailand.

3 Methodology

3.1 Population and sample

The population in this study was 20,966 elderly people living in Muang District, Nakhon Sawan Province. This population was selected due to Nakhon Sawan being a province with the highest number of elderly people in Thailand (Department of Administration, Ministry of Interior, 2019). The sample group selected consisted of 378 elderly people aged 51-65 years living in Muang District, Nakhon Sawan Province. The sample size was determined using the Krejcie and Morgan Table at a 95% confidence level and 5% acceptable error. Samples were selected using Stratified Random Sampling, with the proportion of individuals
from different sub-districts being specified. As a result, a total of 378 elderly participants from Muang District, Nakhon Sawan Province were included in this study.

3.2 Research instrument

The instrument used for data collection was a questionnaire on the confidence and trust in making online shopping decisions of the elderly people in Thailand. The question items were created specifically under the objectives and conceptual framework of this study. The questionnaire consists of (1) questions about confidence and trust in online shopping decisions and (2) questions about the buyers’ decision-making behavior including topics about demand level, type of products, form of products, product brand, seller, buying quantity, decision-making, and payment method. The research instrument was validated of its quality as follows:

1. To test the validity of the questionnaire, the research advisors were asked to examine the structure of the questionnaire to see whether the question items cover all research objectives and research hypotheses, in order to determine the questionnaire’s construct validity and to make appropriate improvements. The improved questionnaire was then checked by 3 experts to examine the congruence between the questionnaire and the dependent variables in order to determine its content validity. As a result, the Item-Objective Congruence (IOC) scores of all question items were found to be more than 0.5, indicating their validity to be used in further data collection (Prasopchai Pasunon, 2015).

3.3 Data collection

The data collection in this study was conducted as follows:

1. Related research studies and academic documents were explored for concepts and theories to be used as a guideline for designing a questionnaire.
2. The questionnaire was created according to the conceptual framework and objectives of the study. The questionnaire was then proposed to advisors and experts for review, suggestions, and improvement.
3. The questionnaire about technology acceptance and online shopping decisions of the elderly in Muang District, Nakhon Sawan Province was distributed to the sample group used in the study.
4. The answered questionnaires were collected from the elderly in Amphoe Mueang, Nakhon Sawan Province and checked for completeness. The data were then retrieved for analysis.

3.4 Data analysis

The data analysis was done in accordance with the nature of the instrument used to collect the data by using ready-made software to calculate statistics from the data in the questionnaire. To answer the research objectives, the confidence and trust affecting online shopping decisions of the elderly in Muang District, Nakhon Sawan Province were analyzed using Multiple Regression Analysis.

4 Results

The data analysis results on the confidence and trust factors of the elderly respondents found that overall, the confidence factors in making online shopping decisions were rated at a high level (x̅ = 4.14). When considering each item, the item with the highest mean value was
“online business operators providing customer data protection” ($x \bar{=} 4.30$), followed by “online business operators selling a wide variety of products ($x \bar{=} 4.23$), and “online business operators providing a secure payment system” ($x \bar{=} 4.13$).

Table 1. Confidence factors affecting the elderly’s online shopping decisions agriculture product.

<table>
<thead>
<tr>
<th>Confidence in online shopping decisions</th>
<th>X</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Online business operators being professional – i.e. product delivery, product exchange.</td>
<td>4.02</td>
<td>0.94</td>
<td>High</td>
</tr>
<tr>
<td>2. Online business operators being responsible – i.e. delivering correct products as ordered, accepting product returns.</td>
<td>4.01</td>
<td>0.99</td>
<td>High</td>
</tr>
<tr>
<td>3. Online business operators selling a wide variety of products.</td>
<td>4.23</td>
<td>0.77</td>
<td>Highest</td>
</tr>
<tr>
<td>4. Online business operators providing a secure payment system.</td>
<td>4.13</td>
<td>0.78</td>
<td>High</td>
</tr>
<tr>
<td>5. Online business operators providing customer data protection.</td>
<td>4.30</td>
<td>0.84</td>
<td>Highest</td>
</tr>
<tr>
<td>Overall</td>
<td>4.14</td>
<td>0.73</td>
<td>High</td>
</tr>
</tbody>
</table>

The results on confidence and trust affecting online shopping decisions of the elderly were then analyzed using Multiple Regression Analysis and the All Enter method, before comparing Sig. values at the 0.05 significance level with results as follows;

The regression analysis on confidence factors in online shopping decisions (X1) and trust factors in online shopping decisions (X2) found that both factors significantly influenced the decision to shop online among the elderly. Both could also jointly predict technology adoption at 65.20%. When considering the level of influence using beta coefficients of confidence and trust factors, trust factors were found to be the most influential factors towards the elderly’s online shopping decisions (Beta=.833), followed by confidence factors (Beta=.174). This could be put into a standard predictive equation as follows;

Table 2. Regression analysis of confidence and trust affecting the elderly’s online shopping decisions.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized regression coefficient (β)</th>
<th>Standardized regression coefficient (Beta)</th>
<th>t-statistic</th>
<th>Sig. (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.393β</td>
<td>0.174</td>
<td>2.182</td>
<td>.030*</td>
</tr>
<tr>
<td>Confidence in online shopping decisions (X1)</td>
<td>0.194</td>
<td></td>
<td>5.525</td>
<td>.000*</td>
</tr>
<tr>
<td>Trust in online shopping decisions (X2)</td>
<td>0.980</td>
<td>0.833</td>
<td>6.492</td>
<td>.000*</td>
</tr>
<tr>
<td>R</td>
<td></td>
<td></td>
<td>0.808</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td>0.652</td>
<td></td>
</tr>
<tr>
<td>Adjust R²</td>
<td></td>
<td></td>
<td>0.650</td>
<td></td>
</tr>
</tbody>
</table>

* Statistical significance at the .05 level

Standard Predictive Equation $Z_{CT}=.174X1*.833X2*

$R^2 = .652$

When considering the unstandardized regression coefficients ($\beta$) of confidence and trust factors influencing online shopping decisions of the elderly, confidence was found with $\beta = .980$, while trust was found with $\beta = .194$, with both being at a statistically significant level of
From the unstandardized regression coefficients, a prediction equation can be created as follows:

\[ Y \text{ (TAM)} = 0.393 + 0.194 X_1 + 0.980 X_2 \]

\[
(2.182^*) \quad (5.525^*) \quad (6.492^*)
\]

\[ R^2 = 0.652 \]

From the unstandardized regression coefficients:

When confidence in online shopping decision (X1) increases by 1 unit, it will affect the elderly’s online shopping decision by 0.194 units when the other factors are fixed;

When trust in online shopping decision (X2) increases by 1 unit, it will affect the elderly’s online shopping decision by 0.980 units when the other factors are fixed.

When summarizing the results of the data analysis in accordance with the research hypothesis, the hypothesis created based on the literature review can be accepted. This is because confidence and trust were found with statistically significant effects on the elderly's online shopping decisions, with trust factors being the most influential, followed by confidence in making online shopping decisions.

5 Conclusion and Suggestions

Both confidence and trust factors were found to affect online shopping decisions of the elderly in this study. This might be due to customers having more trust for sellers who are willing to sell their products, provide adequate information, and be open to their customers. Other factors such as integrity also contribute to customer trust. Therefore, business operators should sell products or services to customers at fair prices and set a profit structure appropriate to the quality of products and services they provide. They should also keep promises with customers as agreed in terms of quality, quantity, price, and conditions of responsibility. They should have the ability to manage problems and find solutions to the causes by studying methods from various sources of knowledge. They should be ready for business changes and be able to adapt to changing environments or new opportunities, as well as being ready to meet the needs of consumers that vary and differ in each area, requiring a variety of adaptation methods depending on the market. This is in line with Sari, Ramelan, Safitri, & Inas, (2022) who has explored factors affecting the decisions of elderly people in Nakhon Sawan Province to buy products through digital technology. The study results found that social media and social networking websites provide opportunities for seniors to create a new society and meet new friends, as well as share information amongst their peers. This was found to result in online shopping decisions and product trials at a statistically significant level. This corresponds with Isbel, Mulhall, & Gibson, (2022) in the study “Factors Influencing the Adoption of LINE Application Using for Elderly Users” which found that talking with close friends on social media or the Line application was the most influential factor towards the perception of usefulness of the LINE application, resulting in decisions to buy products. It was followed by the entertainment factor in the use of the LINE application and the convenience factor in the use of the LINE application respectively. This corresponds with Nori, Zucchelli, Piccardi, Palmiero, Bocchi, & Guariglia, (2022) who explored marketing factors on purchases of supplementary foods by elderly people in Pathum Thani Province. The sample elderly population was found to accept mobile phone technology in terms of perceptions of compatibility, security risks, and trust. Social media marketing in terms of word of mouth communication via electronic media was also found to have a significant impact on the elderly's intent to shop via online applications. This is also in line
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As confidence and trust factors were found with significant effects towards the elderly's online shopping decisions, with trust being the most influential towards their purchase decisions, executives and entrepreneurs should place importance on handling their online business with professionalism. This includes professionalism in product shipping and product exchange, as well as responsibility in delivering correct products as the customers ordered and acceptance of returns as agreed. There should also be secure payment systems, customer data protection, and clear business practice guidelines.

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