



Acceptance of Using Thai Air Asia's Online Application of Thai Senior Citizens

Krit Witthawassamrankul¹, Nutchirathorn Nualsom² and Weerapong Nanthasing³

Abstract

This research mainly aimed to 1) study the acceptance of Thai Air Asia Airline's Application and 2) to study the variables affecting the senior citizens' acceptance of the airline. The research instrument was the questionnaires which were distributed to 400 Thai senior citizens. The statistics were frequency, percentage, mean, standard deviation, t-test, One-Way ANOVA at a statistical significance level of 0.05. The results found that mostly respondents were females, ages between 60-74, having lower than bachelor degree level, the current or previous occupation before retirement was freelancers, staying and learning from their children, frequency of use was 1-2 times per year, and objective of flying was travelling. The results of overall acceptance of Thai Air Asia's online application was at a high level (mean = 3.70, S.D.= 0.909). The hypothesis testing found that the different education level, occupation, learning, frequency of use and objectives of travelling, not genders and age ranges affected the acceptance level. The results showed that learning and social factor, particularly staying with their children and learning from the children were the factors affecting the senior citizens' acceptance level of Thai Air Asia Airline's application.

Keywords : Application, Airline, Senior Citizens

1. Introduction

1.1 Background of the Study

Nowadays, an application technology becomes a useful tool for good and service business. It serves as a channel of communication, buying and selling, persuasion, and also public relations. However, the major reason of offering application for business is to increase sales and expand the new market, particularly customers in the new generations such as gen Y and Alpha, who spend more time with technology and social network (Solomon, 2019). Application is used widely in service industry, such as hotel, tourism, and airline. The application can help the business facilitate the service and connect customers directly by mobile phones.

Because of technological advancement, more and more senior citizens increase globally and tend to be the major buyers of products and services. World Health Organization (WHO) estimated that the senior citizens or the elderly will increase every 3 percent per year and reach to 1.4 billion in 2030 and mostly senior citizens will be Asians (World Health Organization, 2019). Therefore, the business has to consider this market and try to increase

numbers of customers from this segment. Though, it is not easy for some business depends on application technology such airline. The senior citizens or the elderly may not accept the application and technology easily due to familiarity, ways of life, tradition, etc. Therefore, the research aimed to study the acceptance level of the online airline application by using Thai Air Asia's online application and use Thai senior citizens as samples of the study.

1.2 Research Objectives

1.2.1 To study the acceptance level of using Thai Air Asia' online application of the Thai senior citizens

1.2.2 To study the variables affecting the Thai Air Asia' online application of the Thai senior citizens.

1.3 Research Questions

1.3.1 What is the acceptance level of using Thai Air Asia' online application of the Thai senior citizens?



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1.3.2 What are the variables affecting the Thai Air Asia' online application of the Thai senior citizens?

1.4 Research Hypothesis

Different personal factors of the Thai senior citizens (such as gender, age, domestic company, education level, occupation, learning, frequency of use and travelling objectives) affected the different acceptance level of Thai Air Asia's online application of Thai senior citizens.

1.5 Scope of the Study

1.5.1 Population and Samples were Thai males and females, whose ages more than 60 years old, use the Thai Air Asia Airline.

1.5.2 The independent variables were gender, age, education level, current occupation and before retirement, learning, frequency of use and objective of flying. The dependent variable was the acceptance of using Thai Air Asia's online application of Thai senior citizens.

1.5.3 Duration of the study was from 1-30 August 2021

1.6 Benefits of the study

The airline can use the results of the study to improve its online application and also find ways to encourage the using of airline application for Thai senior citizens.

2. Literature Review

To the literature review, the research divided this part into concepts and theories, related researches and conceptual framework.

2.1 Concepts and Theories

2.1.1 Senior Citizen or the Elderly

The senior citizen and the elderly are interchangeable. The definition of them refers to the chronological age. World Health Organization (WHO) defined this as the older person or elderly person as people whose ages above 60 years old are defined as the senior citizens or the elderly. United Nation defined 3 levels of aging society as 1) aging society 2) aged society and 3) super-aged society. The aging society started when the senior citizens whose age of 60 or more are more than 10

per cent of a country or senior citizens whose age are more than 65 are more 7 per cent of a country. (WHO, 2001).

Refer to Thai law, the persons whose age are over 60 years old are considered as the senior citizens or the elderly. They are eligible to get benefits mentioned in the law.

2.1.2 Senior Citizen Consumer Behavior

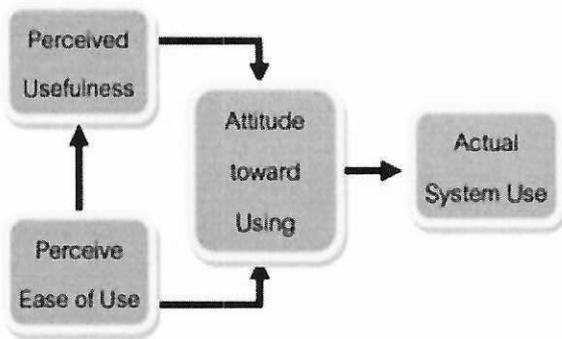
Based the consumer behaviour theory, there are many factors affecting the senior citizen consumer behaviour such as their personal factors, lifestyle, income, social factors, psychological factors and physical limitation. The senior citizens may have different consumer behaviour based on their needs and their social factors involved, such as the recently retired workers. Economically, senior citizens in different stages of family life cycle may have different consumer behaviour, for example, empty nest I and empty nest 2.

Acceptance of the technology is much addressed on the study of senior citizen consumer behaviour as they are considered as the laggard in the innovation adoption. The senior citizens are reluctant to use the innovation and new technology due to numbers of reasons and they are less than 5% who tried the innovation.

2.2 Technology Acceptance Model (TAM)

Davis, Bagozzi & Warshaw (1989) developed the theory of reasoned action: (TRA) and studied the factors affecting the decision to use technology and innovation. The main factors of this study were perceived ease of use, perceived usefulness and behavioral Intention. All of these affect attitude toward use of technology. The further developed theory later added on external factor such as actual system use. This model is frequently referred in the study since it was simple and applicable to people in different ages.

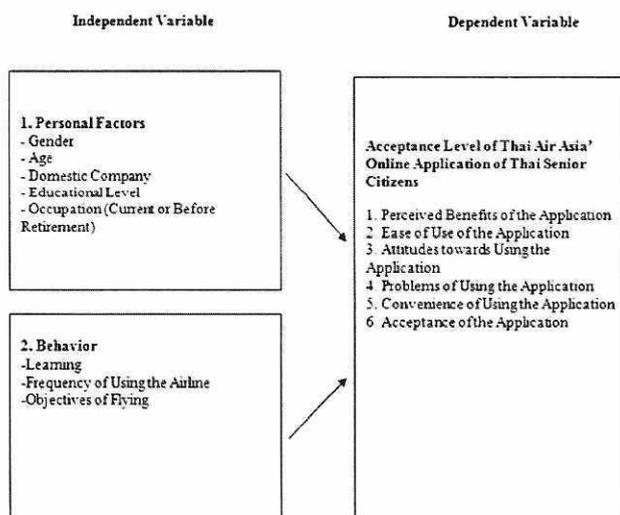
Figure 1: Technology Acceptance Model (TAM)



2.3 Conceptual Framework

The developed conceptual framework included the independent variables personal factors as gender, age, domestic company, education level, occupation (current and before retirement) and behavior as learning, frequency of using the airline, and objectives of flying and the dependent variables as acceptance of Thai Air Asia's online application of Thai senior citizens.

Figure 2. Conceptual Framework.



3. Research Methods and Materials

This quantitative research method included population and sampling, research instrument, data collection and data analysis as follow:

3.1 Population and Sampling

The population of the study were Thai senior citizens, whose ages were equal to or more than 60 years old. Refer to Department of Older Persons (2021), there were 11,627,130 Thai senior citizens in 77 provinces in Thailand, counted as 17.57% of overall Thai population, on December, 31, 2020.

The sample size of the study was 400 Thai senior citizens. The questionnaire respondents based on Taro Yamane's formula was equal to or more than 385. The researcher applied purposive sampling. Before doing the questionnaires, the respondents would be asked and informed their experience in using Thai Air Asia's online Application.

3.2 Research Instrument

The research instrument was the questionnaire, which was developed by the concepts, theories and related research. The questionnaire included 3 parts as part 1) personal factors, which included gender, age, domestic company, education level, occupation (current and before retirement) and behavior as learning, frequency of using the airline, and objectives of flying; part 2) acceptance of Thai Air Asia's online application of Thai senior citizens and Part 3) other suggestions about this topic.

The questionnaires used Likert's rating scale ranging from 1-5 (Lowest to Highest) with the class interval of 0.80 from 5 classes. The ranges and meanings were as:

| | |
|-----------|--------------|
| 4.21-5.00 | Highest (5) |
| 3.41-4.20 | High (4) |
| 2.61-3.40 | Moderate (3) |
| 1.81-2.60 | Low (2) |
| 1.00-1.80 | Lowest (1) |

3.3 Instrument Quality

The researcher applied content validity by asking 3 experts to checked IOC (Index of Item Objective Congruence), which was higher than 0.70; and reliability by tryout of 40 sets. The Cronbach Alpha's Coefficient (α) was

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0.976 overall (33 questions) and each item from reliability tests were more than 0.70 showing the high reliability as:

Perceived Benefits of the Application (6 questions) $\alpha = 0.915$

Ease of Use of the Application (7 questions) $\alpha = 0.917$

Attitudes towards Using the Application (5 question) $\alpha = 0.899$

Problems of Using the Application (6 questions) $\alpha = 0.900$

Convenience of Using the Application (5 questions) $\alpha = 0.884$

Acceptance of the Application (5 questions) $\alpha = 0.892$

3.4 Data Collection

The researcher began to collect the data from the secondary data which included concepts, theories and related researches. Then, he collected the primary data by using Google Form questionnaires. The reason of using Google Form questionnaires was from the limitation of study during covid-19 pandemic. Before the researcher

4.1 Results

Table 1: Results of Personal Factors

| Respondents' Profile | Frequency (n) | Percentage |
|------------------------|---------------|------------|
| 1. Gender | | |
| Male | 158 | 39.5 |
| Female | 242 | 60.5 |
| Total | 400 | 100 |
| 2. Age | | |
| 60 - 64 years old | 205 | 51.2 |
| 65 - 69 years old | 103 | 25.8 |
| 70 - 74 years old | 55 | 13.8 |
| 75 - 79 years old | 26 | 6.5 |
| 80 years old and above | 11 | 2.8 |

distributed the Google Form questionnaire, he asked the experience of using online application of Thai Air Asia of the senior citizens. The non-experienced would not be distributed.

3.5 Data Analysis

After distributing the questionnaires, the researcher quantitatively analyzed the data by using SPSS. Quantitatively, the descriptive statistics were mean, frequency, percentage, and standard deviation and the inferential statistics were t-test and One-Way ANOVA. Qualitatively, the content analysis was used to summarize the written part.

4. Results and Discussion

The results of the study included the result of personal factors, the results of the acceptance level of using Thai Air Asia's Online Application of Thai Senior Citizens, the results from the other suggestion part and the results of hypothesis testing.



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| Respondents' Profile | Frequency (n) | Percentage |
|--|---------------|--------------|
| Total | 400 | 100 |
| 3. Domestic Company | | |
| Alone | 69 | 17.3 |
| Spouses/Partners | 135 | 33.8 |
| Children/Grandchildren | 177 | 44.3 |
| Friends | 18 | 4.5 |
| Others | 1 | 0.3 |
| Total | 400 | 100.0 |
| 4. Education Level | | |
| Lower than Bachelor Degree | 220 | 55.0 |
| Bachelor Degree or Equivalent | 136 | 34.0 |
| Higher than Bachelor Degree | 44 | 11.0 |
| Total | 400 | 100 |
| 5. Occupation (Current or Before) | | |
| Government Officers | 68 | 17.0 |
| Employees | 54 | 13.5 |
| State Enterprise Workers | 20 | 5.0 |
| Businesspeople | 86 | 21.5 |
| Freelancers | 99 | 28.4 |
| Housewife/Domestic Workers | 64 | 16.0 |
| Others | 9 | 2.3 |
| Total | 400 | 100.0 |
| 6. Learning | | |
| Yourself | 80 | 20.0 |
| Children/Grandchildren | 239 | 59.8 |
| Friends | 52 | 13.0 |



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| Respondents' Profile | Frequency (n) | Percentage |
|----------------------|---------------|--------------|
| Television and Media | 26 | 6.5 |
| Others | 3 | 0.8 |
| Total | 400 | 100.0 |

7. Frequency of Using the Airline

| | | |
|----------------------------|------------|--------------|
| 1-2 per year | 200 | 50.0 |
| 3- 4 per year | 118 | 29.5 |
| 5- 6 per year | 53 | 13.3 |
| 7- 8 per year | 11 | 2.8 |
| More than 8 times per year | 18 | 4.5 |
| Total | 400 | 100.0 |

8. Objectives of Flying

| | | |
|---------------------|------------|--------------|
| Travelling | 209 | 52.3 |
| Visiting | 101 | 25.3 |
| Medical Appointment | 36 | 9.0 |
| Doing Business | 53 | 13.3 |
| Other | 1 | 0.3 |
| Total | 400 | 100.0 |

The results of the personal data found that in the study, mostly respondents' gender was females (=60.5%), mostly age ranges was 60-64 years old (=25.8%), mostly, domestic company was with children and grandchildren (=44.3%), mostly, the education level was lower than bachelor degree (=55.0%), mostly respondents' occupation was freelancers (=24.8%), mostly, the respondents learnt from their children and grandchildren (=59.8%), Mostly their frequency of flying was 1-2 time a year (=52.3%)

Table 2: Results of the Acceptance Level of Using Thai Air Asia's Online Application of Thai Senior Citizens

| Acceptance Level of Application | Mean | S.D. | Meaning |
|--|------|-------|---------|
| 1. Perceived Benefits of the Application | 3.70 | 1.033 | High |
| 2. Easy Use of the Application | 3.72 | 0.877 | High |
| 3. Attitudes towards Using the Application | 3.78 | 0.901 | High |
| 4. Problems of Using the Application | 3.72 | 0.970 | High |
| 5. Convenience of Using the Application | 3.79 | 0.893 | High |
| 6. Acceptance of the Application | 3.79 | 0.894 | High |
| Overall | 3.70 | 0.909 | High |



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Results of the Acceptance Level of Using Thai Air Asia's Online Application of Thai Senior Citizens

Based on the results, it showed that the overall acceptance level of using Thai Air Asia's online application was rated at a high level (mean = 3.70, S.D. = 0.909). When considering each item, it found that the highest score was from convenience of using the application (mean = 3.79, S.D. = 0.893) and acceptance of the application (mean = 3.79, S.D. = 0.894). The convenience of using the application is time and place utilities and the acceptance of the application is acceptance of the basic use and use in a daily life. The lowest scores was perceived benefits of the application (mean = 3.70, S.D. = 1.033). The perceived benefits of the application are information of promotion and updated airline information.

Results of the Other Suggestion

The results of the written part found that there were problems of acceptance of using Thai Air Asia's online application as: 1) Problems of acquaintance and familiarity. The senior citizens prefer the ways which they behaviourally use. They will not invest their time in the complicate way.

2) Problems of seeing. The senior citizens informed that they hardly use the application on mobile phones since it is quite difficult for them to read the small letter on the screen and they prefer to see the symbol.

Table 3: Results of Hypothesis Testing

| Personal Factors | T-test | One Way ANOVA | P-Value |
|----------------------|--------|---------------|---------|
| Gender | -0.509 | | 0.611 |
| Age | | 1.367 | 0.245 |
| Domestic Company | | 3.386 | 0.010* |
| Education Level | | 9.702 | 0.000* |
| Occupation | | 3.278 | 0.004* |
| Learning | | 7.895 | 0.000* |
| Frequency of Using | | 4.885 | 0.001* |
| Objectives of Flying | | 4.886 | 0.001* |

The hypothesis testing results showed that different personal factors as domestic company, education level, occupation, learning, frequency of using, and objective of flying affected different acceptance level of using Thai Air Asia's online application (P-value < 0.05). However, different personal factors as gender and age did

not affect different acceptance level of using Thai Air Asia's online application (P-value > 0.05).

4.2 Discussion

In this study, it found that major reasons which affected Thai senior citizens to accept Thai Air Asia's online application as domestic company, learning, education and behavior factors were the factors affecting acceptance of Thai Air Asia's online application. From the study, it showed that the senior citizens who have bachelor degree and above, staying and learning with children and grandchildren and frequently fly accepted more on the online airline application, rather than the opposite ones.

The results of this study would be similar to the study of communication behavior in line application data sharing of elderly people (Somvatasan, 2016) that the senior citizens or elderly people tends to accept and learn online application technology from their children and grandchildren. They will not create and use the complicate online application. They prefer simple use for the daily purposes and will not try if they found no incentives to use. Children and grandchildren affected them very much. The results also goes with the research titled "Factors Influencing the Adoption of Line Application Using for Elderly Users" (Boonprasert, 2017) that the elderly people learned to use application from their descendants. They used simple functions and rarely tried complicate functions and influencing factors of using the application was perceived benefits and the ease of use. The use of the senior citizens are basically when they needed and they will be encouraged to learn by their children.

5. Conclusions

The results found that the senior citizens accepted using Thai Air Asia's online application at a high level for every item. They do not use the application because of their familiarity of the old way and seeing problem. The major factors affected the senior citizens to use the application are their social factors, particularly their children. The senior citizens prefer to use basic functions and will not seek the updated information from the application. The hypothesis testing results showed the difference in domestic company, educational level, occupation, learning, frequency of using, and objectives of flying affect the acceptance level of Thai Air Asia's online application, but gender and age. This showed that genders and ages do not affect but other



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affected the use of online application. Social factors and the needs are vital factors.

5.2 Recommendations

5.2.1 Recommendation of the Study

1. The airline should improve its application to fit the senior citizens because they found some problems in the aspect of easiness to use such as complicate words and contents, small font size, etc.

1. The airline should have video clip or personal demonstration attached in the application. The seniors prefer the demonstration, rather than reading the manual and they would like to see the steps of doing.

3. The airline should encourage more online application using by give some marketing promotion. Based on the study, some seniors asked if there is any additional benefit of trying the online application.

5.2.2 Recommendation for the Further Study

1. This study had limitation due to covid-19 spread; therefore, distributing questionnaire may focus on only the persons participating by Google Form. It would be better if the study goes to the actual places, such as airports and airlines.

2. This study mainly used quantitative research instrument. Therefore, it may need more clarification on the other area, which the questions do not appear. The further study should include qualitative research for the in-depth information.

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