

## **Impact Factors from COVID-19 Influencing Thai Lion Air Passenger Travelling Behavior**

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**Abstract :** *The objectives of this research were 1) to study personal travel factors 2) to study the impact of COVID-19. that affect airline travel behavior 3) to study the impact of COVID-19 affecting airline travel behavior 4) to study the impact of COVID-19 within domestic travel This is quantitative research (Quantitative Research) using questionnaires. (questionnaire) A sample of 403 people was quantitatively analyzed by statistical package program. The statistical values used were frequency distribution, percentage, standard deviation, and multiple regression analysis. Demographic factors There is a sample group of service users at Don Mueang Airport. Most of them were 295 females, aged 21-30 years, 52.1% of students. The factors affecting the travel behavior of passengers using Thai Line On Air as a whole were at the high level at 4.19. The passengers had different personal factors in terms of gender, age, travel objectives, income, occupation and travel frequency. Different affecting the travel behavior of Thai Lion Air passengers are not different. The statistical significance of 0.05 and the impact factors affecting the airline travel behavior of Thai Lion Air passengers were economic, budget and environment. with a statistical significance of 0.05 and the ability to predict the effect of 65.1 percent*

**Keywords:** *Factors affecting COVID-19 airline travel behavior.*

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### **I. INTRODUCTION**

The World Health Organization has announced that the number of cases of COVID-19 (Coronavirus Pandemic) is rapidly increasing outside of China, such as South Korea, Italy, Iran, Spain, and France. 4,000 deaths increased by 200-300 per day. The mortality rate from the disease was about 3.5 percent. Most severe cases are the elderly, smokers and people with underlying diseases such as heart disease, diabetes, in Europe (Italy, France, England, Spain, etc.). The United States, Latin America (Brazil), Russia, India, South Africa have gradually become the center. epidemic and it is an ongoing epidemic area or a new wave which found that the occurrence of a mutation crisis of covid 19 cause the spread more quickly. Data as of February 20, 2021 (Source: worldometer) The situation of Covid-19 around the world reported a total of 111,218,170 cases, 2,462,186 deaths and 86,086,551 recoveries. Top 10 most infected with COVID-19 which are US, India, Brazil, Russia, UK, France, Spain, Italy, Turkey and Germany for Thailand. As the epidemic situation of the Coronavirus Disease 2019 has spread all over the world, the Department of Disease Control has opened the Emergency Operation Center (EOC) since January 4, 2020. To counter the outbreak of coronavirus disease 2019 and start screening for infected people at the channel The first case of infection in Thailand was a Chinese tourist who entered Thailand on January 12, 2020 within two weeks and on January 31, 2020, Thailand has a report. The first Thai patient taxi driver career which has never had a history of traveling abroad but has a history of driving a taxi Providing services to Chinese patients In the later period, the number of patients has increased steadily, both patients traveling from abroad and patients infected within the country. Therefore, the Ministry of Public Health has issued an announcement in the Government Gazette, effective from March 1, 2020, stating that the coronavirus disease 2019 or COVID-19 is the 14th dangerous communicable disease under the Communicable Disease Act B.E. 2015 (Communicable Diseases Academic Development Group, 2021)

Covid-19 virus epidemic Going around the world this time, countries have policies to prevent the spread of the epidemic in a limited area by closing the country, closing the airspace and limiting travel. These restrictions also affect airline and service chain businesses, such as aircraft and engine manufacturers. aircraft repair centers, airports and airline partners as well as insurance in the aviation business Aviation Economy

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Division The Department of Aviation Industry Promotion 2018-2020 provides information which is information before and during the outbreak of the COVID-19 virus. It shows trends and impacts of Thai aviation business both domestically and internationally. of the airport under the company Airports of Thailand Public Company Limited

ธุรกิจการบิน	2018 (1)		2019 (1)		2020 (2) Jan-Nov	
	Numbers	Changes (%)	Numbers	Changes (%)	Numbers	Changes (%)
Passengers (person)	140,472,015	5.53	143,018,131	1.81	43,950,000	-69.27*
Flights (trip)	887,602	6.54	893,522	0.67	363,048	-59.37*
Cargo (ton)	1,637,398	2.65	1,444,852	-11.76	705,171	-51.19*

Reference: (1) Airports of Thailand Public Company Limited 2018-2019 (2) Economic Contribution Civil of Aviation 2020 \*Estimated percentage

Picture 1 Number of passengers flight volume and the air freight volume of 6 international airports in Thailand 2018-2020

From the picture, it was found that when the epidemic of COVID-19 in the year 2563 (Jan.-Nov.), the number of passengers flight volume and the volume of air freight is likely to decline considerably That is, there were 140.47 million passengers and 143.02 million passengers, an increase from 2017 and 2018 by 5.53% and 1.81%, respectively. .) There were 43.95 million passengers, a 69.27 percent decrease from the previous year.\* In conclusion, after the COVID-19 outbreak in 2019, the number of passengers in 2020 has significantly decreased.

Mr. Asawin Youngkeeratiworn, Chief Executive Officer of Thai Lion Air, said that "Thai Lion Air" joined the "IATA Travel Pass" program with the International Air Transport Association. (International Air Transport Association: IATA) is ready to test the system connecting the data to the mobile application, which the IATA Travel Pass is like recording health information of passengers in traveling according to government regulations Along with the results of the vaccine that prevents COVID-19 This will help facilitate passengers when opening the country. or in traveling on international routes "To prepare for the opening of the country to welcome government tourists And preparing to return to fly on international routes of Thai Airways, Lion Air has conducted a data connection experiment and the system with the IATA Travel Pass. In the near future, the IATA Travel Pass will facilitate passengers and also helps passengers to know the steps and various public health requirements and can follow properly before travelling." However, Thai Lion Air continues to pay special attention to all aircraft. and continues to comply with measures to prevent the spread of COVID-19, giving passengers confidence on all flights that the plane is clean Safety and peace of mind when flying together (Ponpailin Chulaphan, 2021)

From the above information causing the researcher to be interested in conducting research studies on the topic "Covid-19 impact factors affecting Thai Lion Air passenger travel behavior" to explore the impact factors of Covid-19 that will affect airline travel behavior will be how and in what aspects

### **Research objectives**

1. To study the personal travel factors of Thai Lion Air passengers
2. To study the factors affecting COVID-19 of Thai Lion Air passengers
3. To study the travel behavior of Thai Lion Air passengers during COVID-19

### **Research limitation**

1. Content scope, primary variables, personal data, gender, age, purpose of travel, income, occupation, frequency of travel, impacts of COVID including economy, budget, environment, variables, travel behavior of passengers using Thai Lion Air service

2. Population scope Thai Lion Air passengers
3. Location scope Don Mueang International Airport online including Facebook Line Instagram
4. Scope of time spent in the study November 2021 to February 2022

### **Research proposal**

1. The researcher is aware of the impact of Covid-19 affecting passenger travel behavior.
2. The results of the research obtained are useful to service providers. and Thai Lion Air
3. The research results are useful to students, teachers, or those interested in furthering their research.

## **II. REVIEW LITERATURE**

Concepts and theories about the COVID-19 epidemic

General knowledge about COVID-19 Background of COVID-19 (COVID-19) Coronavirus is an animal virus. many species Usually does not cause disease in humans, but when mutated into a new species that can cause disease in humans (which is often caused by mismanagement Human nature), while humans are still unknown and have no immunity, there will be outbreaks of disease in humans. COVID-19 (Coronavirus disease 2019) is a respiratory infection caused by corona virus which is officially known as SARS-CoV-2. This can cause fever, cough and possibly pneumonia. The first patient was found in December 2019 in Wuhan. capital city of Hubei Province central china which is a large city with crowded people, causing a pandemic quickly The care was emergency, with more people getting sick and dying than they should have been. Until China had to shut down the city and shut down the country. Later, now China can control it. Until there are almost no new patients, but naturally there will still be people who have the infection. First patient treated in Thailand. As of January 13, 2020, a Chinese person contracted the virus from an outbreak in China. and traveled to Thailand. After that, many more patients came from other countries. As for the first case of infection in Thailand, it was reported on January 31, 2020. The disease is caused by the coronavirus (Corona virus) that has mutated in nature into a new species from nature's attack by humans. It is assumed that the virus may have originated in bats. and mutate when passing through an intermediate animal become a virus New species that cause disease in humans and people to get the infection to spread from person to person However, it has to wait for further proof. There have been similar incidents from the novel coronavirus that occurred in the past, namely SARS (2002) and MERS (2014), both of which 4 The patient had all severe symptoms and had to stay in the hospital. Therefore, it is not difficult to prevent the spread of the disease. In the case of COVID-19 patients who are transmitted, there are both those who have few symptoms. or may have no symptoms In addition to those with severe symptoms, which are much less Therefore, the outbreak is more difficult to control. The outbreak closest to this one is the 2009 influenza epidemic (Influenza A (H1N1) pdm09 virus) in 2009, which started from America. and then spread all over the world. But people infected with COVID-19 can spread the infection over time of infection for longer The outbreak is likely to be more widespread. and more difficult to control (Faculty of Medicine Mahidol University, 2020)

Concepts and theories about behavior (Edward C. Tolman) referred to in consumer behavior theory can be applied to explain the decision-making behavior of passengers with 2 concepts: economic concepts; and concepts in psychology

The concept of economics is divided into two areas.

1. Consumer behavior theory based on utility theory that consumers buy or service because the product or service causes satisfaction
2. Consumer behavior theory Based on the lines of equal satisfaction, utility-based consumer behavior analysis is very confined, far from reality. Later, a tool to explain consumer behavior was discovered called line of equal satisfaction Indifference curve

Concepts in psychology include learning theory.

1. Stimulus response theories (S-R model) Learning occurs in response to stimuli such as rewards, gifts, privileges.
2. Cognitive theories are positive behaviors. or negative without other influences involved, such as attitudes, beliefs, past experiences and deep understanding For example, even though the airline passengers will receive a

good service, however. If the passenger has faith or a bad attitude towards the airline can not make passengers a customer of the airline

3. Gestalt theories are theories that are more relevant to all components. sub components The key is understanding or seeing the problem. past experience and expected results

4. Field theories are all available information pertaining to an individual person. and environment (Edward C. Tolman cited in Narinsiri Chiangphan, 2017)

**Related research**

Chebli (2020) has studied the impact of the COVID-19 pandemic. with the consumption behavior of 308 tourists found that the Covid-19 epidemic will affect the intention of safety tourists cost Confidence and attitude The study aims to explore the impact of the coronavirus (COVID-19) pandemic on traveler behavior and determine the intentions to change it. At present, traveler behavior will affect intentions in terms of personal safety, economic costs, confidence. And this final point of view explains the important findings. And the practical results of this study suggest that the current Covid-19 outbreak will affect traveler behavior. intentions in terms of personal safety, economic costs, confidence and attitude

Narinsiree Chiangphan (2017) studied the factors influencing the tourism behavior of foreign female tourists traveling in Bangkok. It was found that different demographic factors did not affect different tourism behaviors. Factors that attract tourism from outside and tourism barriers influence tourism behavior. However, internal tourism driving factors and past travel experiences had no influence on the tourism behavior of foreign female tourists in Bangkok.

Nutprawee Likhitsaran (2019), studying the impact of tourism on communities surrounding Phu Toei National Park. Suphan Buri Province, found that the impact on the economy Environment affecting tourist attractions to communities around Phu Toei National Park Suphanburi Province

Chonpat Chuaygarut et al. (2020) factors affecting tourism behavior of Thai youths after the Covid-19 era. It was found that the factors affecting tourism behavior of Thai youths mostly focused on the budget factors

**Conceptual framework**

Factors affecting the impact of COVID-19 affecting the airline travel behavior of Thai Lion Air passenger

**Independent Variable**

<p><b>Personal Information</b></p> <ul style="list-style-type: none"> <li>- Gender</li> <li>- Age</li> <li>- The purpose of travel</li> <li>-Income</li> <li>- Occupation</li> <li>- Frequency of travel</li> </ul>
<p><b>Impact of COVID 19</b></p> <ul style="list-style-type: none"> <li>- Economic</li> <li>- Budget</li> <li>- Environment</li> </ul> <p>(Nuchprawee Likitsaran (2019))</p>



**Dependent Variable**

<p><b>Travel behavior of passengers using Thai Lion Airlines</b></p> <ul style="list-style-type: none"> <li>-Passenger Income</li> <li>-Travel Expenses</li> <li>-Passenger's decision to use the service</li> <li>-The safety factor of a tourist attraction</li> <li>-Travel products and services</li> <li>-Travel plan</li> </ul> <p>(Narinsiree Chiangphan (2017))</p>
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### III. METHODOLOGY

#### Population and sample

##### Research population

Population, including Thai passengers traveling with Thai Lion Air which here cannot be counted. Therefore, the researcher determined the sample size. Using an unknown number of computational formulas (Cochran, W. G., 1997), the formula  $n = Z^2 / 4e^2$  yielded the following sample numbers:  $n = 384$ . The researcher actually collected 403 sets, so they were all used in the data analysis.

##### Creation and verification of research tools

The tools used for data collection in this research were The questionnaire is divided into 3 parts as follows:

The first part is a questionnaire about the personal information of Thai Lion Air passengers who use it. Low cost airline services include gender, age, purpose of travel, income, occupation, travel frequency. It is a closed-ended response question with multiple choice, each question has different measurement levels as follows.

The second part is a questionnaire on the impact of Covid 19 on tourism behavior. The questionnaire is a 22-item Likert Scale, where each question is divided into five levels of expectations, which is a measure of data. Interval Scale and set the values of the separate assessment as expectations as follows:

Part 3 Questionnaire on factors affecting travel of passengers using Thai Lion Air. that uses a scale according to the Likert scale method

##### Testing the quality of research tools

1. Bring the questionnaire to 3 qualified persons to check the correctness of the questions. It was found that all questions received an IOC score of 0.67-1.00 passed the criteria.

2. Take the questionnaire that has been modified according to the advice of experts to Try Out with a sample of close to 30 sets to test the reliability of the tool, the researcher measured confidence by using the Alpha coefficient. Coefficient) of Cronbach's Alpha, the confidence value is 0.951.

##### Data collection

Primary Data Collection with questionnaires collected online Secondary collection of data from sources such as research journals, textbooks, articles, publications, and websites.

##### Statistics used in data analysis

Descriptive Statistic such as showing percentage, frequency, mean to summarize the preliminary data from the collected questionnaires.

##### Using Inference Statistics

Inferential statistics such as T-Test , One Way ANOVA, Multiple Regression

##### Research results

Part 1 General information of the respondents

From the study of general information about the respondents such as gender, age, purpose of travel, income, occupation, travel frequency. The details are as follows.

Table 1 Number and percentage of samples classified by general information about the respondents

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(n=403)		
General information of the respondents	Numbers (person)	Percentage
<b>1. Gender</b>		
Male	108	26.8
Female	295	73.2
<b>Total</b>	<b>403</b>	<b>100.0</b>
<b>2. Age</b>		
Below 20 years	37	9.2
21 – 30 years	265	65.8
31 – 40 years	59	14.6
Above 40 years	42	10.4
<b>Total</b>	<b>403</b>	<b>100.0</b>
<b>3. The purpose of travel</b>		
Business trip	45	11.2
Vacation	293	72.7
Training/Seminar	48	11.9
Others	17	4.2
<b>Total</b>	<b>403</b>	<b>100.0</b>
<b>4. Income</b>		
Less than 10,000 baht	136	33.7
15,000 – 20,000 baht	142	35.2
20,001 – 25,000 baht	67	16.6
More than 30,000 baht	58	14.4
<b>Total</b>	<b>403</b>	<b>100.0</b>
<b>5. Occupation</b>		
Students	210	52.1
Government Officers	35	8.7
Private company employees	107	26.6
Business owners	51	12.7
<b>Total</b>	<b>403</b>	<b>100.0</b>
<b>6. Travel frequency</b>		
1-2 time/year	148	36.7
3-4 time/year	132	32.8
5-6 time/year	74	18.4
More than 6 time/year	49	12.2
<b>Total</b>	<b>403</b>	<b>100.0</b>

From Table 1, it can be seen that there were a total of 403 people, most of whom were female. There were a total of 295 people, representing 73%. They were in the age range of 21 - 30 years, most of them were 265 people, representing 65.8%. Most of the samples had the purpose of traveling for tourism the most. There were a total of 293 people accounted for 72.7% of the sample group, the most income is 15,000 – 20,000 baht, a total of 142 people, representing 35.2%, most of them are students / students, a total of 210 people, representing 52.1%, most travel the most is 1-2 times/year, totaling 148 people, representing 36.7%.

### Part 2 Impact of COVID-19

Table 2. Mean and standard deviation of samples classified by COVID-19 impact

(n=403)

<b>The impact of COVID-19</b>	$\bar{x}$	SD.	<b>Interpret</b>
Economic impact	4.25	0.878	The most

Budget impact	4.21	0.946	The most
Environment impact	4.21	0.919	The most
<b>Overall</b>	<b>4.22</b>	<b>0.914</b>	<b>The most</b>

From Table 2, the overall results of the COVID-19 impact analysis were at the highest level ( $X = 4.22$ ). with an average of 4.25, followed by environmental impact The mean was 4.21 and the budget impact was 4.21.

‘Part 3 Factors Affecting Travel Behavior of Passengers Using Thai Lion Air

Table 3 Mean and standard deviation of opinion levels regarding travel behavior of passengers using Thai Lion Air.

(n=403)

<b>Passenger behavior in using Thai Lion Airlines</b>	$\bar{x}$	<b>SD.</b>	<b>Variable</b>
Passenger Income	4.17	0.938	More
Travel Expenses	4.11	0.944	More
Passenger’ Decision in using Services	4.27	0.874	Most
The safety factor of a tourist attraction	4.26	0.898	Most
Travel products and services	4.08	0.948	More
Travel plan	4.30	0.846	Most
<b>Overall</b>	<b>4.19</b>	<b>0.908</b>	<b>More</b>

From Table 3, the results of the analysis of opinion levels regarding the travel behavior of passengers using Thai Lion Air. passenger income Overall, it was at a high level ( $X = 4.19$ ) when considering each aspect, it was found that the satisfaction level was the highest in terms of travel planning. with an average of 4.30 (S.D.=.846), followed by passenger decision-making. with an average of 4.27 (S.D.=.874) on the safety factor of tourist attractions with an average of 4.26 (S.D.=.898) in terms of passenger income with an average of 4.17 (S.D.=.938), the average cost of travel expenses was 4.11 (S.D.=.944) and tourism products and services, with an average of 4.08 (S.D.=.948), respectively.

**Hypothesis Test Results**

**Hypothesis 1:** Passengers using Thai Lion Air service with different personal factors such as gender, age, purpose of travel, income, occupation, travel frequency. Thai Lion Air passengers' travel behaviors differed by using T-Test Independent statistical hypothesis testing and One Way Analysis of Variance (T-Test Independent). ANOVA) and hypothesis testing used a 95% confidence level.

**Table 4 shows the results of the comparison of personal factors affecting the airline travel behavior of Thai Lion Air passengers.**

<b>Personal Factor</b>	<b>t/F</b>	<b>Sig</b>	<b>Hypothesis Test Result</b>
Gender	0.297	0.261	No difference
Age	0.985	0.525	No difference
Purpose of travel	1.109	0.252	No difference
Income	1.058	0.354	No difference
Occupation	0.961	0.586	No difference
Frequency of travel	1.228	0.096	No difference

≤ 0.05

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From Table 4, it was found that when passengers had different personal factors in terms of gender, age, travel purpose, income, occupation and travel frequency. It will affect the travel behavior of Thai Lion Air passengers no different. statistically significant 0.05

**Hypothesis 2:** Factors affecting COVID-19 are economic, budget, and environment. Affects the airline travel behavior of Thai Lion Air passengers by using hypothesis testing statistics of independent variables and dependent variables. By analyzing multiple regression equations and testing hypothesis, 95% confidence level was used.

Table 5 Impact of Covid-19 affecting Thai Lion Air passenger travel behavior

ตัวแปร	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.993	.120		8.261	.000
Economic	.114	.035	.143	3.264	.001*
Budget	.226	.036	.283	6.289	.000*
Environment	.421	.035	.483	11.862	.000*
R=.807 <sup>a</sup> R Square =.651      Adjusted R Square= .648      SEE.=.40023					

≤ 0.05

From Table 5, it was found that the impact factors affecting Thai Lion Air passengers' travel behaviors were economic, budget and environment. with a statistical significance of 0.05 and the ability to predict the effect of 65.1 percent

### IV. CONCLUSION AND DISCUSSION

The results of the analysis of the personal data of the sample group found that mostly female Are in the age range of 21 - 30 years with the purpose of traveling for tourism have income 15,000 – 20,000 baht, have a student career / travel 1-2 times / year The results of the analysis of data on impact factors, the results of the COVID-19 impact analysis on the economy overall are at the highest level. The economic impact affects travel behavior. with an average of 4.36 in terms of overall budget, at the highest level 4.21 Environmental aspects Overall, it was at the highest level. 4.21 Results of an analysis of opinion levels on travel behavior of passengers using Thai Lion Air. passenger income Overall, it was at a high level at 4.17 in terms of travel expenses. Overall, it was at a high level at 4.11 in terms of passenger decision-making. Overall, it was at the highest level at 4.27 in terms of tourism products and services. Overall, it was at a high level at 4.06 travel planning Overall, it was at the highest level at 4.30

The results of the research hypothesis test No. 1 found that when passengers had different personal factors in terms of gender, age, travel purpose, occupation and travel frequency. It will affect the travel behavior of Thai Lion Air passengers no different. statistically significant 0.05

The second hypothesis testing results revealed that the impact factors affecting Thai Lion Air passengers' travel behaviors were economic, budget and environment. with a statistical significance of 0.05 and the ability to predict the effect of 65.1 percent

Discuss the results

From the research hypothesis test No. 1, it was found that when passengers had different personal factors in terms of gender, age, travel purpose, income, occupation and travel frequency. It will affect the travel



behavior of Thai Lion Air passengers no different. statistically significant 0.05 this was in line with the research of Narinsiree Chiangphan (2017) on factors influencing the tourism behavior of foreign female tourists traveling in Bangkok. It was found that different demographic factors did not affect official behavior. different travel Factors that attract tourism from outside and tourism barriers influence tourism behavior. However, internal tourism driving factors and past travel experiences had no influence on the tourism behavior of foreign female tourists in Bangkok. From the second hypothesis testing, it was found that the impact factors affecting Thai Lion Air passengers' travel behaviors were economic, budget and environment. It has a statistical significance of 0.05 and the ability to predict the impact of 65.1%, consistent with the research of Nutprawe Likhitsaran (2019) on the impact of tourism on communities surrounding Phu Toei National Park. Suphanburi Province. It was found that the economic impact Environment affecting tourist attractions And the research of Chonpat Chuaygarut, Amornruthai Phusanam and Oranong Dechamanee(2020) factors affecting tourism behavior of Thai youths after the Covid-19 era. Most of the youth tourism in Thailand focuses on the budget factor.

## V. Recommendations

From the study, it was found that passengers traveling with Thai Lion Air during the coronavirus have normal travel behavior where passengers are most affected will be the economic, financial and safety environments in which they will travel. Therefore, airlines should focus on the issue of stable ticket prices and the issue of cleaning the area. Reduce congestion in various processes within the airport even more.

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