
Factors Affecting Airline's Passenger Choice During COVID-19 Pandemic

ปัจจัยที่ส่งผลต่อการเลือกใช้บริการสายการบินในช่วงการแพร่ระบาดของไวรัส COVID-19

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Abstract

COVID-19 pandemic has caused huge impacts on the airline business. International travel restrictions, restricted mobility, and social distancing have significantly ceased the aviation industry. Several studies are related to the airlines' attractive attributes focusing on the criteria that passengers concern when they select an airline for their travel. The COVID-19 pandemic might affect passengers' perception of the airlines' attractive attributes. This study attempts to identify the airlines' attractive attributes under the COVID-19 pandemic circumstance. There are 501 respondents via Google Form. These respondents' data was analyzed by Exploratory Factor Analysis (EFA) and Analysis of Variance (ANOVA) methods. The finding reveals that the preventive measures for the infectious disease have become an attribute that the passengers concern during the period of the COVID-19 pandemic. Other attributes such as price, service level, and safety are still important. Besides, the passengers' socio-demographic characteristics affect the importance level that the passengers attach to an airline's attributes.

Keywords: COVID-19; Attractive attributes; Airline's passenger; Airline business

บทคัดย่อ

การแพร่ระบาดของเชื้อไวรัสโควิด 19 (COVID-19) ส่งผลให้การเดินทางระหว่างประเทศหยุดชะงัก มาตรการต่างๆ ถูกนำมาใช้เพื่อป้องกันและชะลอการแพร่ระบาดของเชื้อไวรัส ที่ผ่านมามีการศึกษาเกี่ยวกับปัจจัยในการเลือกใช้บริการสายการบินของผู้โดยสาร อย่างไรก็ตามในช่วงเวลาที่เกิดการแพร่ระบาดของโรคติดต่อ อาจมีปัจจัยอื่นที่มีความสำคัญต่อการตัดสินใจเลือกใช้บริการสายการบินของผู้โดยสาร นอกเหนือจากปัจจัยที่เคยมีผู้ศึกษามาแล้ว บทความนี้มีวัตถุประสงค์เพื่อสำรวจปัจจัยที่มีความสำคัญต่อการตัดสินใจเลือกใช้บริการสายการบินของผู้โดยสารภายใต้สถานการณ์การแพร่ระบาดของเชื้อไวรัส โควิด 19 ผู้วิจัยเก็บข้อมูลจากแบบสอบถามออนไลน์ และทำการวิเคราะห์ข้อมูลโดยวิธี การวิเคราะห์องค์ประกอบเชิงสำรวจ และการวิเคราะห์ความแปรปรวน ผลการวิจัยแสดงให้เห็นว่ามาตรการป้องกันการแพร่ระบาดของโรคติดต่อที่สายการบินนำมาใช้ เป็นปัจจัยสำคัญในการเลือกใช้บริการสายการบิน นอกจากนี้ปัจจัยด้าน ราคา การบริการ และความปลอดภัยเป็นปัจจัยที่มีความสำคัญเช่นกัน ผลการศึกษายังชี้ให้เห็นว่ากลุ่มตัวอย่างที่มีลักษณะทางประชากรศาสตร์แตกต่างกันให้ความสำคัญต่อปัจจัยแต่ละประเภทในระดับที่ต่างกัน

คำสำคัญ: โควิด-19, ปัจจัยดึงดูด, ผู้โดยสารสายการบิน, ธุรกิจสายการบิน

Introduction

The world in 2020 is now facing a pandemic caused by a coronavirus named SAR-CoV-2 or COVID-19 with unprecedented worldwide measures (Correia et al., 2020). An impending economic crisis and recession from social distancing and self-isolation have had a detrimental effect on travel restrictions and quarantine affecting the world economy, especially in the tertiary sector, such as the airline business (IATA, 2020). The latest estimation (ICAO, 2020) indicates a decline in international passenger traffic in numerous airports worldwide for the first nine months of 2020 compared to the previous year.

Previous research on airline service attributes has shown the great interest of understanding airlines' ability to attract and satisfy air passengers (Medina-Muñoz et al., 2018). The previous studies have mostly been limited to only some significant factors affecting a passenger's choice of airline, satisfaction, behavior, and loyalty. These attributes have not been tested for a pandemic situation. This study aims to identify an airline attractive attribute that the airlines and future study could adopt to increase airline survivability, responding to the effects caused by the COVID-19 pandemic. The purpose of this study is to investigate the emergent attractive attributes of airlines in general, not specifically international or domestic flight, during COVID-19 from the passengers' and potential passengers' point of view, and to examine the effects of passengers' socio-demographic characteristics on airlines' attractive attributes.

Literature review

Airline Attractive Attributes

Airline attractive attributes are the factors which influence passengers' purchasing decision (Medina-Muñoz et al., 2018). *Fares and other price-related factors* have been generally one of the most important attributes for selecting an airlines (Fleischer et al., 2012), especially for those with price sensitivity (Wen and Lai, 2010). Passenger satisfaction and repurchase intention are likely to increase if airlines have well-established pricing strategies (Calisir et al., 2016). *Marketing and distribution channel is the second attractive attribute*. The loyalty program impacts passengers' selection of airlines, and co-branded credit card bundling with the

frequent flyer program (FFP) is one of the reasons for the passenger to repurchase (Park, 2010). The third attribute that has a significant impact on passengers' FSNCs selection is *flight schedule and connection* (Park et al., 2004; Kim and Park, 2017). Flight timetable, frequency, day of flights, types of flight are positively related to airlines' attractiveness. Moreover, airlines with excellent choices of flight connections gain more passengers' attention (O'Connell and Williams, 2005). *Safety and punctuality* are the fifth attribute that passengers consider when choosing airlines (Chen and Chao, 2015; Kim and Park, 2017). The airlines with safety standards gain more competitive advantages (Fleischer et al., 2012; Medina-Muñoz et al., 2018). Punctuality is among the top drivers for passengers' satisfaction (Forgas et al., 2010). Thus, flight delays destroy passengers' satisfaction, leading to decreasing intention to repurchase. Passengers will be willing to pay more to minimize the risk of flight delays (Zhang, 2012). The sixth attribute, *reputation, and experience of passengers* impact airlines' choice and lead to customer loyalty (Forgas et al., 2010). Passengers are likely to fly with the same airlines considering strong brand images (So et al., 2017), previous experience with airlines (Martinez-Garcia and Royo-Vela, 2010), and also word of mouth effect (Park et al., 2004). *In-flight space* is the seventh attribute (Loureiro and Fialho, (2017) ; Sezgen et al., 2019); this is another attractive attribute considered by LCCs' passengers regarding space between seats as well as FSNCs' passengers who feel that tight legroom can cause discomfort for long haul flights (Kim and Park, 2017; Patel and D'Cruz, 2018). The eighth attribute is the *quality of in-flight catering and entertainment* for FSNCs' passengers' satisfaction (Wafik et al., 2017). However, LCCs' passengers will only consider this attribute only if it is free of charge (Medina-Muñoz et al., 2018). *Attention and service during the customer journey* are considered as the ninth attribute. The significant stages of passengers' journey from pre-flight, during flight, and post-flight impact passengers' satisfaction. The experienced in-flight services contribute to passengers' repurchasing (Wafik et al., 2017).

Preventive measures for infectious diseases in air transport

Air transport has a vital role in spreading infectious diseases. It increases the chance that new emerging diseases can spread across the world (Korzeniewski, 2017). The passengers sitting in an aircraft's cabin are exposed to the risk of getting infected by infectious diseases, including airborne, fomites, food-borne, and vector-borne disease. There were four cases of severe acute respiratory syndrome-related coronavirus (SARs) infections on a commercial flight (Mangili and Gendreau, 2005).

During Covid-19 pandemic, International Air Transport Association (2020) has provided the operational guideline for commercial flights, including in-flight physical distancing, hygiene equipment (e.g. gloves, mask, personal protection equipment (PPE) for crews, and hand sanitizers for both crews and passengers), cleaning and disinfection (e.g. increasing frequency of cabin and lavatories cleaning). Airlines around the world have already implemented various measures on their passengers and crews. Despite the importance of these preventive measures and their effects on airline passengers, only a few studies focus on this topic, and most of them are from the medical field (Mangili and Gendreau, 2005; Korzeniewski, 2017). Passengers thought that wearing a mask was not important because it was uncomfortable and inconvenient (Chou and Lou, 2011). The earlier research had never considered

preventive measures for infectious diseases as an essential attribute affecting an airline's attractiveness. A recent study (Chen and Chao, 2015) proposed various factors affecting airline selection of departing passengers from Kaohsiung International Airport and included cabin sanitation in the in-flight service aspect. However, the Covid-19 pandemic has increased the need and the importance of these preventive measures (Machida et al., 2020). The authors propose that preventive measures for infectious diseases are a significant attribute affecting an airline's attractiveness.

Effect of passengers' socio-demographic characteristics

Passengers with different socio-demographic characteristics will place a different level of importance on an airline's specific attribute. Age, gender, income, marital status are the characteristics that differentiate the passenger's expectation (Clemes et al., 2008). Men will place higher importance on safety than pricing (Medina-Muñoz et al., 2018). Elderly passengers are more concerned about ground service and in-flight comfortability, while younger passengers are more concerned about in-flight service and entertainment. High-income passengers expect high service quality and place more importance on fidelity programs than low-income passengers (Chen and Chao, 2015). In-flight catering, space, and flight schedules are less important for single passengers (Medina-Muñoz et al., 2018).

Previous researches have shown the effects of socio-demographic characteristics on the importance of preventive measures regarding infectious diseases. The perceived importance of preventive measures related to infectious diseases varies among different ages, gender, income levels, and family characteristics. Older adults, women, and married couples show more potential to adopt preventive measures during the Covid-19 pandemic (Machida et al., 2020). Married couples and older adults perceive the high efficacy of wearing a mask (Tang and Wong, 2004). Women wash their hands more often than men, and education level affects the perceived efficacy of handwashing (Chen et al., 2020). According to the literature review, the authors propose the following hypothesis.

H1: There are significant differences in the mean of importance level across the airlines' attractive attributes for males, females, and alternative gender.

H2: There are significant differences in the mean of importance level across the airlines' attractive attributes for different age groups.

H3: There are significant differences in the mean of importance level across the airlines' attractive attributes for passengers' different education levels.

H4: There are significant differences in the mean of importance level across the airlines' attractive attributes for passengers' different levels of income.

H5: There are significant differences in the mean of importance level across the airlines' attractive attributes for passengers' household characteristics.

H6: There are significant differences in the mean of importance level across the airlines' attractive attributes for different air travel frequency groups.

Methodology

Questionnaire design

The authors began by reviewing the related literature to identify potential attributes affecting passengers' decisions. The authors then listed nine main attributes and 44 sub-attributes. The questionnaire was drafted with two main sections: 1) respondent's information and 2) attractive attributes. A validity test for the draft questionnaire was conducted with 98 samples. Eight sub-attributes were removed during the test to make the model more valid and easier to be interpreted. Cronbach's alpha of the adjusted constructs was acceptable and ranging from 0.75 to 0.87. The authors then finalized the questionnaire into nine main attributes and 36 sub-attributes presented in Thai and English. The respondents were asked to assess the level of importance of each attribute when they select an airline. Each question has a 5-point Likert scale ranging from 1 (not important) to 5 (extremely important).

Data collection

With the COVID-19 pandemic limitation, the authors could not collect the data by face-to-face approach. Therefore, the data was collected online in Thailand using Google Forms distributed through the social media channel during the first week of May 2020, and the convenient sampling method was implemented. There were approximately 165.1 million international and domestic passengers in 2019 (The Civil Aviation Authority of Thailand, 2020). The authors applied Yamane's method (Yamane, 1967) to calculate the sample size, and the result suggested that 399 samples should be collected. Initially, there were 580 responses. During the data screening process, the authors checked for outliers and found 79 outliers. The researchers then decided to exclude all of the outliers to avoid the distortion (Pallant, 2010). Therefore, there are 501 responses in the analysis processes (table 1).

Table 1: Respondents' demographic

Characteristics	% of total	
Gender	- Male	27.5%
	- Female	68.7%
	- Alternative gender	3.8%
Age	- Below 21 years old	3.2%
	- 21-35 years old	47.9%
	- 36-50 years old	33.3%
	- 51-64 years old	13.8%
	- 65 years old and above	1.8%
Education	- High school or equivalence	2.4%
	- Bachelor's degree or equivalence	58.3%
	- Master's degree or equivalence	26.9%
	- Doctorate's degree or equivalence	12.4%
Income	- 500-1,000 USD per month	45.3%
	- 1,001- 1,500 USD per month	24.8%
	- 1,501 USD and above per month	29.9%

Characteristics		% of total
Household characteristics	- Living alone	22.8%
	- Living with 2-3 people	46.3%
	- Living with more than 3 people	30.9%
Air travel frequency	- Once or twice per year	35.7%
	- 3-4 times per year	29.1%
	- More than 4 times per year	35.1%

Data analysis

The data has been analyzed using Exploratory Factor Analysis (EFA) to reduce the data collinearity, the difficulties of interpretations, and group the data in suitable component(s). EFA was used to lessen the number of linear combinations of the primary variables but still explain most of the variabilities in the correlation pattern (Pallant, 2010). The authors decided to use EFA because there was a new potential attribute adding to the existing attributes. After that, the extracted components were tested for reliability using Cronbach's alpha (α). The authors implemented an analysis of variance to identify the difference between the mean of levels of importance that the passengers attached to each attribute depending on their socio-demographic characteristics or travel frequency. For hypothesis testing, a traditional one-way analysis of variance was applied. Tukey's test were implemented for the cases in which equal variance between treatments is assumed. For the cases in which equal variance between treatments is not assumed, Welch's test and Games-Howell's test were implemented (Field, 2009). These statistical methods were adopted because they are suitable for testing the null hypothesis that three or more means are the same.

Findings

Measurement model for an airline's important attributes during COVID-19 pandemic

Table 2 displays the factor loadings, mean, and deviation obtained from the extraction method of principal component analysis of the passengers' responses. The selected attributes are considered moderately important to highly important since they obtained mean values between 3.49 and 4.71. Out of 36 sub-attributes, the five most important are safety standard of passengers, flight punctuality, safety standard of cargo and checked luggage, hand sanitizer provided by airlines, distancing in seat assigning and passengers' data privacy, and less physical contact airlines' procedures, respectively.

The Kaiser-Meyer-Olkin (KMO) value is 0.885, affirming the sampling adequacy (Kaiser, 1974), and Bartlett's Test of Sphericity is less than 0.001 ($p=0.000$), indicated that the analysis is statistically significant (Bartlett, 1954). A principal component analysis using the varimax rotation method generated nine attributes of which the eigenvalues above 1. The attributes comprised all 36 items in the original scale and explained an acceptable percentage of the total variance (67.24%). The measurement achieved a Cronbach's alpha of 0.688 – 0.881, only one attribute is under 0.7, which is the airline image and reputation. In contrast, the attributes receiving the highest construct reliability are a preventive measure and with the average Cronbach's alpha of 0.7845, the original scale is considered very good.

Table 2: Results of the Exploratory Factor Analysis.

Components/Variables	Factor Loadings	Mean	SD	Reliability
Preventive Measures				$\alpha = 0.881$
Hand sanitizer provided by airlines	0.831	4.53	0.74	
Distancing in seat assigning	0.795	4.53	0.76	
Passenger temperature screening	0.773	4.50	0.79	
Less contact airlines' ground procedures	0.763	4.52	0.74	
Face mask provided by airlines	0.759	4.48	0.81	
Pandemic prevention policy compliance	0.707	4.62	0.70	
In-flight food and beverage suspension	0.555	3.91	1.05	
Extra Fees and Charges				$\alpha = 0.844$
Seat reservation fee	0.796	3.69	1.14	
Additional checked luggage fee	0.755	3.86	1.09	
Ticket information changing fee	0.747	3.79	1.07	
Prior checked luggage fee	0.719	3.95	0.98	
Transaction fee	0.679	4.01	1.03	
Travel insurance fee	0.593	3.61	1.10	
Safety and Reliability				$\alpha = 0.870$
Safety standard of passengers	0.840	4.71	0.61	
Safety standard of cargo and luggage	0.807	4.63	0.70	
Passenger data privacy	0.724	4.53	0.77	
Punctuality of flight	0.680	4.64	0.67	
Flight Schedule and Connections				$\alpha = 0.791$
Frequency of flights	0.816	3.95	0.95	
Days of the week of flights	0.802	3.95	0.94	
Time scheduling of flights	0.687	4.33	0.78	
Diversity and network of flight routing	0.636	4.14	0.85	
In-flight Catering and Entertainment				$\alpha = 0.861$
Quality of in-flight food and beverage	0.822	4.03	0.86	
Variety of in-flight food and beverage	0.807	3.85	0.91	
In-flight entertainment and equipment	0.793	3.99	0.94	
Ticket Pricing				$\alpha = 0.708$
Ticket distribution channel	0.748	4.30	0.83	
Payment methods	0.655	4.37	0.78	
Ticket promotion	0.586	4.29	0.93	
Ticket price	0.559	4.10	0.94	
In-flight Space and Ground Service				$\alpha = 0.781$
Aircraft aisle space	0.758	3.81	0.92	
Overhead bin space for carry-on luggage	0.745	3.88	0.90	
Pre-flight ground handling service	0.506	4.18	0.77	
Airline Alliance and Loyalty Program				$\alpha = 0.763$
Member of the alliance	0.779	3.49	1.167	
Frequent flyer and loyalty program	0.757	3.68	1.164	

Components/Variables	Factor Loadings	Mean	SD	Reliability
Airline's Image and Reputation				$\alpha = 0.688$
Review from other passengers	0.816	3.80	0.95	
Rank in renowned ranking websites	0.671	3.52	1.00	
Image and reputation in general	0.567	4.19	0.81	

The results of the EFA suggested that the overall result of the model is satisfactory. For each dimension, a new variable was created by computing the weighted mean value of the importance attached to all the items that comprised the attributes. The standardized factor loadings also reached acceptable or satisfactory values, ranging from 0.506 to 0.840. Moreover, 24 items achieved factor loadings above 0.7 (Hair et al., 1987). The component 'preventive measures' has become highly important compared with other attributes. Its level of importance is almost at the same level as 'safety standard'. A possible reason for this finding is that the 'preventive measures' are related to life matter as similar to the 'safety' component, i.e. it can be referred to as 'health safety.'

Socio-Demographic Characteristics

The ANOVA and Multiple Comparison results are presented in table 3. Passengers aged more than 65 tend to be concerned about flight schedules less than the passengers in other age ranges ($p < 0.05$). The possible explanation could be that this group of passengers is mostly leisure or "visiting friends and relatives" passengers and might be more flexible with the flight schedule. The passengers aged between 21-35, 36-50, and 51-64 years old are more concerned about airlines' image and reputation than passengers aged below 21 years old ($p < 0.001$). Gender also affects the importance level passengers attach to each component. Women and alternative gender attached more importance to preventive measures for transmissible diseases than men ($p < 0.001$, $p < 0.1$). This finding is in line with the previous research suggesting that women are concerned about hygiene and are willing to adopt the preventive measures more than men (Chen et al., 2020; Machida et al., 2020). This finding implies that women and alternative gender passengers might be more willing to comply with the preventive measures that airlines implement. Moreover, women place more importance on price compared to men ($p < 0.1$). Women are bargain-seekers and price-conscious, so they concern about getting the best value from the money that they spend. They are looking for discounts and promotional prices and evaluating their value from the products or services with different price options (Bakewell and Mitchell, 2006). Therefore, pricing strategy might be more effective on women passengers. Passengers who have higher than 1,501 USD per month attach more importance to frequent flyer programs than passengers who have a lower income ($p < 0.05$). The possible explanation for this finding might be that passengers who have higher income have more potential to be a member of a frequent flyer program (Kunst, 2019). Credit cards for high-income passengers may also provide more privileges related to the frequent flyer program (i.e. accumulating more frequent flyer points when spending with a credit card). Passengers who have a high school education level attached more importance to ground service quality than passengers who have a higher educational level ($p < 0.05$). Passengers with high school educational levels might need more help during their journey,

and this finding is in line with the previous study (Medina-Muñoz et al., 2018). As a result, the authors accepted H1, H2, H3, H4, and rejected H5 and H6.

Table 3: Result of descriptive analyses – Mean (Standard Deviation), ANOVA and Multiple Comparison.

Gender	Preventive measures ^b	Extra fees and charges ^a	In-flight catering ^b	Alliance and loyalty program ^a
1. Male	4.21 (0.73)	3.70 (0.81)	3.90 (0.87)	3.51 (1.12)
2. Female	4.53 (0.54)	3.87 (0.79)	3.94 (0.77)	3.58 (1.02)
3. Alternative gender	4.51 (0.51)	3.72 (0.91)	4.61 (0.57)	4.13 (0.90)
F (p)	11.059***	2.460*	12.595***	2.923*
Multiple comparison	1-2: -0.324*** 1-3: -0.304*	1-2: -0.173*	1-3: -0.710*** 2-3: -0.673**	1-3: -0.617** 2-3: -0.553*

Age (year)	Safety and reliability ^b	Flight schedule ^a	In-flight catering ^b	Alliance and loyalty program ^a	Image and reputation ^a
1. Below 21	4.70 (0.73)	4.31 (0.60)	3.93 (0.87)	3.16 (1.06)	3.06 (0.70)
2. 21-35	4.52 (0.65)	4.01 (0.68)	3.84 (0.89)	3.44 (1.03)	3.82 (0.74)
3. 36-50	4.75 (0.44)	4.19 (0.69)	4.12 (0.68)	3.74 (1.02)	3.93 (0.71)
4. 51-64	4.65 (0.57)	4.20 (0.69)	3.97 (0.65)	3.78 (1.08)	3.89 (0.61)
5. 65 and above	4.72 (0.58)	4.28 (0.36)	3.89 (0.90)	3.72 (1.30)	3.67 (0.58)
F (p)	4.414**	5.785***	3.259**	3.143**	5.703***
Multiple comparison	2-3: -0.231***	1-5: 1.034** 2-5: 0.732** 3-5: 0.907** 4-5: 0.928** 2-3: -0.175*	2-3: -0.286**	2-3: -0.296**	1-2: -0.756*** 1-3: -0.866*** 1-4: -0.831***

Education	Extra fees and charges ^a	In-flight space and ground service ^b
1. High school	3.67 (1.08)	4.56 (0.54)
2. Bachelor's	3.84 (0.76)	3.96 (0.73)
3. Master's	3.88 (0.83)	3.95 (0.74)
4. Doctorate's	3.59 (0.83)	3.85 (0.66)
F (p)	2.193*	5.361**
Multiple comparison	3-4: 0.292*	1-2: 0.591** 1-3: 0.610** 1-4: 0.706**

Income per month	Safety and reliability ^b	Alliance and loyalty program ^a
1. 500-1,000 USD	4.53 (0.68)	3.50 (1.00)
2. 1,001- 1,500 USD	4.72 (0.46)	3.41 (1.06)
3. 1,501 USD and above	4.70 (0.50)	3.84 (1.06)
F (p)	5.851**	7.183**
Multiple comparison	1-2: -0.191** 1-3: -0.174**	1-3: -0.338** 2-3: -0.436**

Practical Implication

This study also provides practical implications for airlines. The passengers are highly concerned about safety. This result suggests that the airlines must regularly perform safety monitoring, aircraft inspection and seriously train their personnel. Besides, the airlines should handle passengers' baggage with care to avoid any damage. The results reveal that the flight schedule is highly important. The COVID-19 can alter the flight schedule, so the airlines must carefully arrange the flight schedule to serve passengers' demand. Price and fees are very important during the pandemic, so the airlines should waive or reduce fees for ticket change or refund since the flight schedule is easily subjected to change. The results also reveal that food and beverage services are still important. During the pandemic, there might be a certain limitation that prohibits the airlines from delivering inflight service; thus, the airlines can provide some of those services on the ground. For example, the airlines can provide snack boxes at the boarding gate. Review from other passengers can affect the purchasing decision. The airlines should monitor reviews from passengers and gathering this feedback. The airline should take serious action on negative feedback, which can damage the airline reputation. During the pandemic, the passengers are concerned about the preventive measures for infectious diseases. Airlines need to improve their hygiene and sanitation by providing sanitizer and seriously implementing preventive measures such as temperature screening and reducing human contact during the passenger journey. The airlines should improve their self-check-in platforms either at the airport or via passengers' own devices and encourage them to process through these platforms to reduce human contact.

Conclusions

The contribution of this study is an update on the important airline's attractive attributes with the finding of the importance of preventive measures of infectious diseases. The Results revealed the nine significant attributes of the airline attractiveness with 36 sub-attributes, including the preventive measures for infectious diseases. This study has some limitations. Firstly, the sample of passengers is limited due to the difficulty in conducting an online survey. The authors were not able to control the socio-demographic characteristics of the respondents. In addition, all respondents are from Thailand; therefore, the finding may not be applicable to other areas. Similar studies could be done with the respondents from different countries and cultural backgrounds and analyze the comparative result. Secondly, this study focused on the importance level that passengers attach to airlines' attributes in general, rather than on a particular type of flight or travel motivation. The evaluation of possible differences between each group of passengers could be investigated in future research.

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