Assessing the Change in Air Travelling Behaviour Patterns During Pre and Post Pandemic COVID-19 in Malaysia on Customer Loyalty: The Case of AirAsia

Asnida A/P Uda Tampa, Liena Qistina Rosli, Milawati Tahasan, Mohamad 'A'isy Bazli Abu Bakar & *Raja Norliana Raja Omar

Faculty of Hospitality, Tourism and Wellness, University Malaysia Kelantan
Corresponding email: norliana.ro@umk.edu.my

ABSTRACT

The study that has been conducted is assessing the change in air travelling behaviour patterns during pre and post-pandemic COVID-19 in Malaysia towards customer loyalty: the case of AirAsia. The problem statement for this study is the emergence of the COVID-19 pandemic has led to the occurrence of changes in this pattern of air travelling behaviour. Previously, it could be seen that the total rate of people travelling is very high. However, COVID-19 has led to a decrease in travel by the public. This phenomenon happens because they are still worried and consider their safety first. The objective of this study was to understand the change in behaviour patterns of travelling pre and post COVID-19. Next, to identify the travelling patterns pre and post-pandemic COVID-19. Next, to examine the impact of travel behaviour change on customer loyalty in using AirAsia flights. This research applied a quantitative approach. In this study, the survey was conducted through questionnaires that included questions on travelling purpose, frequency of trips, travel duration and the impact of travel behaviour change on customer loyalty.

Keywords: Pandemic, Travel Behaviour, Travel Patterns, COVID-19 and AirAsia.

INTRODUCTION

COVID-19 was designated a worldwide pandemic by the World Health Organization (WHO) in March 2020. As a result, many countries have imposed some measures of social imprisonment on their citizens. The examples include the closure of schools, shops, and restaurants, and the ban on groups or public events. In addition, the government has also implemented a movement control order for everyone as a preventive measure against this coronavirus outbreak. Therefore, the complete prohibition of large-scale protests and gatherings throughout the country includes religious, sporting, social and cultural activities. In addition, air travel also undergoes very significant changes in travel behaviour patterns. This is because previously, the airline had high demand and a large number of customers. However, the COVID-19 pandemic has led to changes where there are not many more customers. In addition, many flights also had to be cancelled due to the COVID-19 pandemic and, as consequence, the occurrence of this movement control order.

Next, before the COVID-19 pandemic, many people would travel, either within the country or abroad. This is because the current situation is still safe, and there is nothing for everyone to worry about. However, after the COVID-19 pandemic, there was a change in travel behaviour, where no one people went to travel. In addition, the COVID-19 pandemic has affected the tourism sector in the world. During this pandemic, there was a significant decline in demand for travel. In other words, the demand for travel before the pandemic was very high compared to after the pandemic COVID-19.

Besides that, this travel behaviour was seen before and after the outbreak of the COVID-19 pandemic. Where nowadays people prefer to stay at home only. Also, the lack of feeling to go travelling anywhere. However, if people want to travel, they should abide by the rules and

always take care of social imprisonment. Next, do not be too present in a crowded place. Undoubtedly, this new norm is happening in society caused of this pandemic.

The aviation industry has become one of the important sectors in the industry. The current COVID-19 crisis has forced the airline industry to adapt quickly to the situation. Many planes grounded due to a significant drop in passenger demand (Serrano & Kazda, 2020). While the COVID-19 pandemic has become more widespread quickly in this situation of extraordinary world interconnection, particularly through air traffic, international air routes have faced major challenges due to travel suspensions and large-scale disruptions, and travel to different places has different constraints. Appropriately, the outbreak has caused a sharp decline in air travel activity, and some airlines are experiencing international and national recovery (Hassan, 2022). The impact of travel behaviour change on customer loyalty in using AirAsia flights may vary across countries depending on the travel restrictions imposed by the government of that country, as well as the risk perceptions of citizens. The current study explores the influence of lockout policy on changes in travel behaviour during the third wave of the COVID-19 pandemic in Malaysia (Dias et al., 2021).

Due to the global coronavirus crisis, there were changes before and after the COVID-19 dynamics in the customer loyalty of AirAsia. Before the advent of COVID-19, customers did not hesitate to go on a tour. They have their own travel purpose and do not have to worry about the surrounding situation. However, following the emergence of the COVID-19 virus, it has also disrupted customer loyalty to AirAsia. Currently, they are more concerned about the airline's determination to deal with this virus, as far as the company is concerned about the safety of their customers.

Significance of the Study

This research will be contributed to by the Ministry of Tourism, Arts and Culture (MOTAC) and also to AirAsia as a contribution of data and also to the tourism industry and tourists in general. The significance of the study is divided into two managerial parts and literature aspects. In the managerial aspect, the assessing the change in air travelling behaviour patterns during pre and post-pandemic COVID-19 in Malaysia toward customer loyalty. This is because the occurrence of this pandemic has changed the pattern of travelling, which has led to many significant changes. This research also can help to find the reason for the change in travel behaviour patterns during this COVID-19. Thus, people will be able to know about these travel behaviour patterns before and after COVID-19.

In the literature aspect, this research will provide knowledge to students about this study, which is assessing the change in air travelling behaviour patterns during pre and post-pandemic COVID-19 in Malaysia towards customer loyalty. The reason why is exposing students to this research process gives them a different perspective than just seeing it in social media and journals. This is because students can and will know what happens, can know and how the change of travel patterns due to COVID-19. Next, this study also informs the student that during this pandemic COVID-19, there was a change in the travel behaviour pattern. Besides that, this study to make the student know how travel behaviour patterns will change due to COVID-19.

LITERATURE REVIEW

Change in Behaviour Pattern

According to Zhao et al. (2018), "Changes in the fundamental pattern of travel behaviour that are sudden, significant, and long-lasting" are classified as "travel pattern changes." Travel behaviour research examines people's physical movements outside of their usual areas for any

reason (Axhausen, 2014). The movement of freight is only mentioned in the context of persons transporting freight for the workplace, shopping, or other personal reasons. Human movement and interaction patterns affect the spreading of infectious illnesses, especially during outbreaks (Peixoto et al., 2020). Every human is defined by their unique mind, which they develop in relation to their habitats. They tend to have a common pattern of certain aspects that mimics the basic characteristic of all human beings rather than having distinct environments and completely varied behaviour (Reddy, 2016).

Travelling Purpose

People travel for various reasons. According to Abdullah et al. (2021), travelling purpose is the essential reason why travellers go on a daily basis. This might be the cause that travellers have little or no influence over their surroundings. In travel studies, various trip purpose categories have been utilised for classifications refined (i.e. work, personal, unstructured time, shopping, appointment, visiting, school and college) (Krizek, 2003). The purpose of travel is to foster social connections, provide opportunities to learn and grow, and demonstrate dedication. It allows travellers to be fully immersed in an activity, learn new skills, and experience different cultures. It brings individuals and other travellers closer together (Filep, 2014). According to Yang et al. (2020), the trip purpose is included more thoroughly to correctly capture the impression and encourage post-travel plans in the model.

Frequency of Trips

One tap-in of passenger movement is defined as a trip (Jenelius & Cebecauer, 2020). In most situations, transferring between different modes of transportation would result in a new route; however, there are exceptions at several key transfer hubs. According to Mokhtarian (2001), travel has always been a component of human daily life, whether in the shape of a vehicle or a non-vehicle method. It was defined as "any distance travelled by any mode of transportation" or "trips or multi-trips completed from origin to destination". A trip is defined as a journey between two activities that take place in different areas (Timmermans et al., 2003). The trip's definition depends on the activity's specification to determine its beginning and ending points. By modifying the definitions of "activity," it is possible to vary the frequency of trips, the most often used reference unit in the transportation modelling (Axhausen, 2017).

Travel Duration

Travel duration is a basic concept of transportation, and reducing it is a crucial component of planning. The time it takes to travel between two points usually rises as the distance between them grows (Park, 2020). The amount of time it takes to go from one location to another is called travel duration. According to Zahavi & Ryan (1980), the study of travel time was conducted on the assumption that daily visits and travel time were both constant and reliable. The appeal of a destination is linked to the duration of travel. Trips between high-population-density regions are more probable than trips between low-population-density regions. The larger the distance between the supervisor and the subordinate, the longer the travel duration and the further distant the goal (Mäkelä et al., 2021).

Pandemic

Pre-Pandemic

In the global economy before COVID-19, one of the most significant industries has been travel and tourism, which has contributed to more than 320 million people and 10% of global GDP jobs internationally (Adam, 2020). Since 2018, AirAsia has been not only an airline, but it has also transformed into hotels, vacations, activities, and online shopping. AirAsia is more of a travel, lifestyle and e-commerce platform such as AirAsia super apps, integrated logistics,

including long-distance shipping. AirAsia was Southeast Asia's first low-cost carrier. AirAsia has over 160 destinations, and it has transported over 600 million guests from Asia, Australia, the Middle East and the United States (AirAsia, 2020). AirAsia has won various awards for employee and workplace excellence, customer service, innovation and operational safety.

Pandemic COVID-19

The Covid-19 pandemic has now affected the travel and tourism sector, particularly the airline and hotel industries. This is the biggest challenge in the history of the airline sector. In 2020, low-cost carrier the COVID-19 pandemic impacted AirAsia, resulting in a reduction in passenger numbers carried by down to 13.31 Million (Müller, 2021). The COVID-19 outbreak has impacted AirAsia Group Bhd's financial performance, resulting in a total in the first quarter, the company lost RM967.15 million, compared to a profit after taxes in the same quarter, RM21.31 million earned. previous year (Bernama, 2020b). AirAsia Bhd and AirAsia X Bhd (low-cost airline companies) have laid off 10% of their 24,000 employees to continue their survival due to the COVID-19 pandemic (Bernama, 2020a).

Post-Pandemic

The Ministry of Tourism, Arts and Culture (MOTAC) introduced the “green travel bubble” to promote domestic tourism (Sheikh Yahya, 2020). Langkawi have been chosen as the first tourism location under the pioneer travel bubble project, which aims to help locals improve their socio economic prospects. To travel to Langkawi under the travel bubble, tourists must have health documentation. Terengganu is also participating in efforts to reopen the tourism sector but only for individuals who have fully vaccinated. Chairman Ariffin Deraman as State Tourism, Culture, and Digital Technology Committee said Terengganu will open a tourism industry in Tasik Kenyir, Pulau Kapas, Pulau Tenggol and Pulau Redang (Bernama, 2021). Interdistrict travel will be permitted during Phase 3, but not interstate travel.

Customer Loyalty

Customer loyalty is a major outcome of relationship marketing Hennig-Thurau et al. (2002) and is seen as a high level of competition for a service provider. The main factor that results in customer loyalty is customer satisfaction as it is influenced by customer expectations, the perceived service quality and perceived value (Chonsalasin et al., 2020). A loyal customer can raise an organization's profitability by lowering costs and increasing revenue per customer (Hennig-Thurau et al., 2002). Customer loyalty is extremely important to an airline company, as stated by (Gómez at al., 2006), Airlines prioritize loyal passengers because they require less effort to engage with and are less price sensitive. Consumer loyalty, according to Aasker (1991), is the possibility that a customer may migrate to another brand/company, particularly when that brand/company changes its price, product characteristics, communication, or distribution systems.

AirAsia as Company

AirAsia know as low-cost airline that located in Malaysia and it was founded in 1993. In December 2001, Tune Air Sdn Bhd (Tony Fernandes' company) purchased this airline from DRB-Hicom for RM1 and assumed its debt of RM 40 Million. Tony Fernandes, the CEO of AirAsia Group, has made his company profitable after two years (WargaBiz, 2018). To pay off the debt, Tony Fernandes has mortgaged his home and withdrawn his personal savings. He also had to handle 200 staff and 2 old Boeing 737s without any prior airline experience. The tagline of Air Asia is "Now Everyone Can Fly" is famous in Asian countries (Ming, 2018). The airline sells low-cost flights throughout Asia, including Vietnam, Thailand, and Malaysia, under the name AirAsia (Emma, 2019). AirAsia has a large network throughout Malaysia and Southeast Asia.

Research Hypothesis

In this study, there were three hypotheses formulated:

H_1 There is a significant relationship between travelling purpose and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

H_2 There is a significant relationship between frequency of trips and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

H_3 There is a significant relationship between travel duration and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

Research Framework

Figure 1 depicts the conceptual framework; the independent variables that have been chosen are travelling purpose, frequency of trips, and travel duration. The dependent variable is customer loyalty.

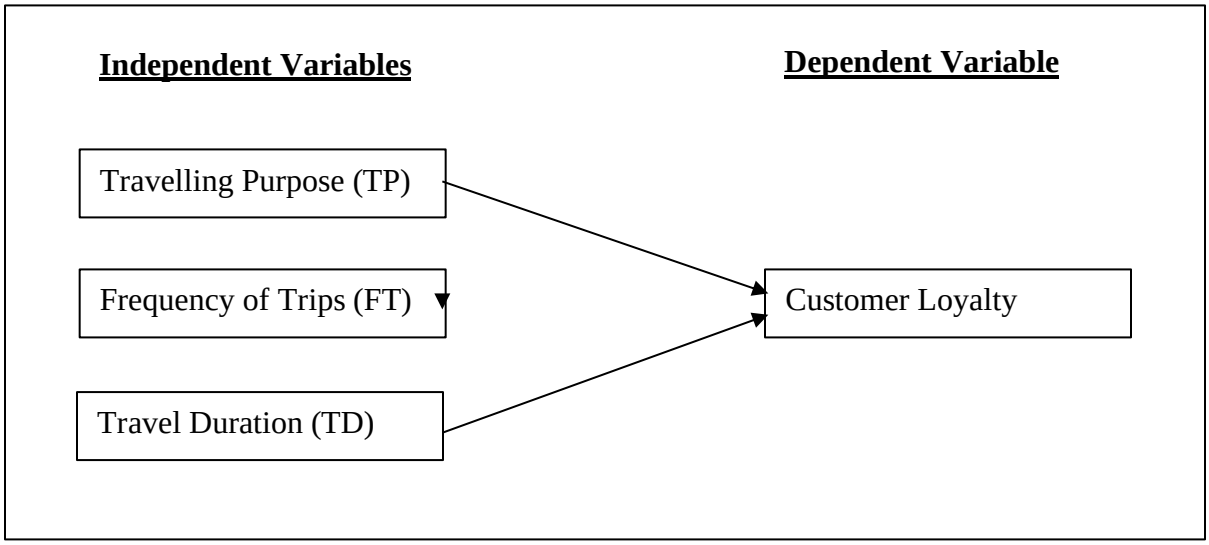

Figure 1: Research Framework

METHODOLOGY

Research Design

A research design is a decision of making choices. It means that the research design serves as a framework for carrying out the research project and outlines the steps necessary to gather data for answering the research topic. The goal of the research design is to assure the study's validity. Thus, the research design for the study will be applied to a quantitative approach.

This must be done to accomplish the study goal of gathering information regarding Assessing the change of air travelling behaviour patterns during pre and post COVID-19 in Malaysia towards customer loyalty: the case of AirAsia. Therefore, data will be collected virtually through the google form platform, and the respondent will get a questionnaire; as a key data collecting strategy for this quantitative investigation, the questionnaire allows the study to get trustworthy and accurate information.

Data Collection

Due to the current worsening pandemic of COVID-19 situation, researchers have decided to make research methods using smart telephone platforms and social media. The research method that the researcher used to know the change in air travelling behaviour patterns during pre and post-pandemic COVID-19 in Malaysia towards customer loyalty is a questionnaire method. The respondents will answer all the questions by using the google form platform. The questions

provided are straightforward, concise and easy to understand by the respondents. Aside from that, using the internet or mobile application to collect results is quick and uncomplicated. This means that, depending on the scope and reach of the questionnaire, it can get insights in as short as 24 hours or less. Google forms link has been distributed on social media to get a response from the AirAsia flight traveller.

Sampling

Non-probability sampling and probability sampling are the two types of sampling procedures. According to Frerichs (2008), the probability sampling approach necessitates a broad formulation of simple random sampling. As a result of a random number table or a random number generator, each remaining in the population has the same chance of being chosen for the sample.

The sampling approach in this research is a non-probability convenience sampling method. Instead of picking from whole populations, the convenience sampling approach allows researchers to select any of their preferred respondents who are accessible. Furthermore, the convenience sampling strategy was used in this study since it may save researchers time and money while collecting data. In addition, by using this sampling, researchers can collect data from the target population more quickly, easily, and at a low cost.

Data Analysis

Four types of data analysis were used in this study: frequency analysis, t-test analysis, reliability analysis and Pearson correlation analysis. The data obtained was using SPSS version 26.

FINDINGS

Result of Frequency Analysis

Table 1 below shows the result of the frequency analysis:

Table 1: Frequency Analysi

Item	Frequency	Percentage (%)
Gender		
Female	168	43.6
Male	217	56.4
Education Level		
Primary School	1	0.3
High School	75	19.5
College	96	24.9
Degree or Bachelor	188	48.8
Masters	24	6.2
PHD	1	0.3
Age		
10 – 21 years old	37	9.6
21 – 30 years old	191	49.6
31 – 40 years old	134	34.8
Above 41 years old	23	6.0
Employment Status		
Student	140	36.4
Part Time Job	23	6.0

Self-employed	38	9.9
Government Employee	80	20.8
Private Employee	104	27.0
Monthly Income		
Below RM500	120	31.2
RM5001 – RM1000	31	8.1
RM1001 – RM2000	60	15.6
RM2001 – RM5000	152	39.5
Above RM5000	22	5.7
Marital Status		
Single	250	64.9
Married	135	35.1

This table is a summary of the demographics. In demographics, there are six items, which are gender, education level, age, employment status, monthly income and marital status. The total number of females was 168 (43.6%), while the number of mthe ale was 217 respondents (56.4%). The highest percentage of respondents' education level was degree or bachelor (48.8%) with 188 respondents, second highest education level is college (24.9%) with 96 respondents. The third highest is high school which have, with 19.5% (76 respondents). The fourth is master, which has 6.2% (24 respondents). Both primary school and PHD have the same percentage, 0.3% (1 respondent).

The highest percentage of respondents was respondents with a range of age from 21-30 years old with 49.6% (191 respondents). The second highest age range is 31-40 years old (34.8%), which is 134 respondents. The third highest range of age respondents was respondents. The survey is 10-20 years old, which have 9.6% (37 respondents). The last age range is above 41 years old, with 6.0% with 23 respondents.

The highest number of respondents completed the survey is a student, with 36.4% (140 respondents). With private employees for 27.0% (104 respondents). There were 20.8%, with 80 respondents who were government employees. 9.9% with 38 self-employed respondents and 6.0% with 23 respondents doing a part-time job.

The respondents had an income level ranging from below RM500 to above RM5000. The highest income level is 39.5%, with 152 respondents who had an income of RM2001-RM5000 while 31.2% with 120 respondents had an income below RM500. There are 60 respondents, 15.6%, who had an income of RM1001-2000. The last is 5.7%, with 22 respondents with an income above RM5000. The total number of respondents for singles is 250 respondents and 64.9%, while for the married is 135 respondents and 35.5%.

Result of T-test Analysis

Table 2 below shows the result of the t-test analysis:

Table 2: T-test Analysis

				Paired Differences						
Pair	**COVID-19**	**Mean**	**Std. Dev**	**Mean**	**Std. Dev**	**Std. Error**	**95% Confidence Interval of**	**t**	**df**	**Sig. (2-tailed)**

						Mean	the Difference				
							Lower	Upper			
TP	Pre	2.88	.439	.834	.533	.027	.780	.887	30.691	384	.000
	Post	2.05	.350								
DT	Pre	2.6877	.47838	.40260	.57276	.02919	.34520	.45999	13.792	384	.000
	Post	2.2851	.34432								
FT	Pre	2.5857	.26355	.22143	.50308	.02564	.17102	.27184	8.636	384	.000
	Post	2.3643	.30818								

A paired-sample t-test was conducted to evaluate the change of travelling patterns pre and post-pandemic COVID-19. The results showed a significant decrease in the travelling purpose of travel Pre COVID-19 (M = 2.88, SD = .439) to Post (M = 2.05, SD = .350), t (384) = 30.691, p < .001 (two-tailed). The mean increase in the test score was .834 with 95% confidence interval ranging from .780 to .887. The eta square statistic (0.71) indicated a large effect size.

Next, the results showed a significant decrease for travel duration of Pre COVID-19 (M = 2.6877, SD = .47838) to Post (M = 2.2851, SD = .34432), t (384) = 13.792, p < .001 (two-tailed). The mean increase in the test score was .40260 with 95% confidence interval ranging from .34520 to .45999. The eta square statistic (0.33) indicated a large effect size.

The results showed a significant decrease for frequency of trips for Pre COVID-19 (M = 2.5857, SD = .26355) to Post (M = 2.3643, SD = .30818), t (384) = 8.636, p < .001 (two-tailed). The mean increase in the test score was .22143 with 95% confidence interval ranging from .17102 to .27184. The eta square statistic (0.16) indicated a large effect size.

Result of Reliability Analysis

The table 3 below shows the result of reliability analysis:

Table 3: Reliability Analysis

Scale	Number of Items	Cronbach's alpha
Customer Loyalty	10	0.854

The results for the above reliability analysis are indicative of Cronbach's Alpha variable. For the Likert scale, it shows the value of items for the dependent variable, customer loyalty is 10, and alpha Cronbach 0.854. Cronbach's alpha produced internal consistencies that exceed the minimum value of 0.70 required for acceptable reliability. The Cronbach's Alpha variables were reliable based on the test because Cronbach's alpha was more than 0.70.

Result of Pearson Correlation Analysis

Table 4 below shows the result of the Pearson Correlation Analysis:

Table 4: Pearson Correlation Analysis

Hypothesis	P-Value	Result (Supported/Not Supported)
H_1: There is a significant relationship between travelling purpose and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.	.112	H_1 is supported
H_2: There is a significant relationship between frequency of trips and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.	-.028	H_2 is not supported
H_3: There is a significant relationship between travel duration and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.	.158	H_3 is supported

H_1: There is a significant relationship between travelling purpose and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

The Pearson correlation between travelling purpose and customer loyalty was weakly positive and statistically significant ($r = .112$), $p < 0.05$). Hence, H_1 was supported. This shows that an increase in travelling would lead to higher customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

H_2: There is a significant relationship between the frequency of trips and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

Based on the study conducted, the outcome showed that the frequency of trips was weakly negative ($r = 0$-.028), $p = 0.00$). It meant that H_2 should be rejected. This implies that the relationship between travel duration and customer loyalty pre and post-pandemic COVID-19 is negatively related in the case of AirAsia.

H_3: There is a significant relationship between travel duration and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

Pearson correlation of frequency of trips and customer loyalty was found to be weakly positive and statistically significant ($r = .158$), $p < 0.01$). Hence, H_3 was supported. There was a connection between the frequency of trips and customer loyalty pre and post-pandemic COVID-19 in the case of AirAsia.

DISCUSSION AND RECOMMENDATION

Discussions are aimed at solving questions and addressing hypotheses, as mentioned in the first chapter of this study. In general, this study has extensively researched pre and post COVID-19 customer loyalty in the case of AirAsia. Therefore, based on the study's findings, the impact that affected tourist behaviour would make different outcomes for the passengers who use AirAsia as their travel transportation.

The changes happen after the COVID-19 outbreak, which makes people rarely travel. To ensure proper travel implementation, people should follow the Standard Operation Procedures (SOPs). The SOPs can be used as one of the cores of the establishment to prevent the customers from getting affected by the disease. Thus, under the Conditional Movement Control Order (CMCO), border flying from one place to another in Malaysia becomes difficult. They must go through some procedures, including recording employees' body temperature upon arrival, personal hygiene practices at the premise, alcohol-based hand sanitisers, and check-in using My Sejahtera. However, before COVID-19, customer loyalty toward the service of AirAsia was high because people were free to travel. There was no specific procedure before flying domestic or overseas.

Thus, the recommendation to upgrade the quality of the study when some shortcomings, such as technical issues like a poor internet connection that disrupted the survey procedure and a malfunctioning device, are among the drawbacks. Aside from that, due to social desirability bias, dishonest responses may impact the study. Future studies can limit responses to one account and require participants to fill out their email addresses to eliminate false entries.
To ensure that respondents have no problems with the survey, the questions should be strategically organised, brief, descriptive, and sufficiently graded. Apart from that, the researchers believe this research should not be conducted solely through a poll of everyone. Reaching out to respondents and explaining the survey beforehand can make the manual survey more accessible. Finally, future researchers must guarantee that the application and survey are mobile-friendly so that respondents are not confused by the data and can fully complete the survey.

CONCLUSION

To sum up, this study has been completed to assess the change in air travelling behaviour patterns during pre and post-pandemic COVID-19 in Malaysia toward customer loyalty: the case of AirAsia. This study focuses on AirAsia passengers or people who usually use AirAsia airlines. The result of this research will give a better understanding to researchers that this COVID-19 outbreak has changed the air travelling behaviour pattern during pre and post COVID-19. It also changed the customer loyalty of AirAsia. In this study, part of the research framework, three independent variables and one dependent variable were used. The independent variable is travelling purpose, frequency of trips and travel duration, while the dependent variable is customer loyalty. Due to the current worsening pandemic of COVID-19 situation, the research method that the researcher used to know the change in air travelling behaviour patterns during pre and post-pandemic COVID-19 in Malaysia regarding customer loyalty is a questionnaire method. The respondents will answer the question using the google form provided. The questionnaires consist of 3 sections: Section A, B and C. Therefore, customer loyalty will not be the same and will change based on the travel purpose, frequency of trips, and duration during this COVID-19 outbreak.

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