

The role of e-service quality in influencing customer satisfaction and airport brand image in Indonesia during the COVID-19 pandemic

Anggono Raras Tirto Sakti¹, Nunung Ayu Sofianti², Rudy Rosandy²

^{1,2,3}Institute of Economic Science Indonesia Membangun, Indonesia

Correspondent author: anggono.raras@inaba.ac.id DOI 10.31150/ajebm.Vol3.Iss4.202

Abstract: The Covid-19 pandemic that occurred requires everyone to limit direct interaction or social distancing so that the role of e-service quality in serving customers is a must. This study aims to analyze the role of e-service quality in influencing customer satisfaction and the brand image of airports in Indonesia during the Covid-19 pandemic. Partial least square is used to analyze the relationship between e-service quality, customer satisfaction, and brand image. This study uses a sample of 205 respondents which has received quality e-service by airports in Indonesia. The result shows that e-service quality is a significant determinant of customer satisfaction. E-service quality and customer satisfaction also affect the brand image of airports in Indonesia. The result also shows the indirect effect of e-service quality on brand image through customer satisfaction. This research has implications for improving the brand image of airports in Indonesia, which requires e-service quality features and facilities that must exist at airports and benefit customers so that they will affect customer satisfaction and airport brand image. Airports in Indonesia must make e-service quality features and facilities capable of accommodating customer needs. This study bridges the gap in the literature on the use of e-service quality at the airports during the Covid-19 pandemic by explaining its relationship to customer satisfaction and airport brand image in Indonesia.

Keywords: e-service quality, customer satisfaction, brand image, Covid-19.

Introduction

The Covid-19 pandemic still afflicts Indonesia and the world, all business sectors are affected. At the same time. The airports in Indonesia experience things that are not much different, considering that airport managers are state-owned enterprises (BUMN). This study aims to determine the effect of e-service quality on airport customer satisfaction and brand image due to the Covid-19 pandemic. When the government announces the existence of a New Normal on June 1, 2020, all transportation will be re-opened using strict health protocols. The hope of airport managers is that by opening an airport terminal as a flight terminal, the losses incurred due to a pandemic can be resolved immediately, but in reality this remains burdening. Customers' interest in traveling to domestic or international destinations is still lacking and not yet encouraged.

The Covid-19 pandemic is a matter of concern for the community, because many Indonesians are affected by the virus transmission (Yunus & Rezki, 2020). This is a major factor that causes people feeling hesitate to travel, especially using airport transportation. Thus, airports in Indonesia need to form a positive brand image about airport secure level regarding the spread of Covid-19. It is important for every airport to then developing an image of a secure and comfortable public places from which encouraging the willingness to travel of customers. Indeed, creating a profitable, strong, and unique brand image leads to a sustainable competitive advantage with attractive economic returns (Dirsehan & Kurtuluş, 2018; Keller et al., 2011; Persson, 2010). Airports in Indonesia need to evaluate the brand image in order to create a positive perception in the minds of passengers.

Brand image is the main variable analyzed in this study. Measurement of brand image is important in airports in Indonesia, because (1) the importance of brands that are already well-known to customers in the aviation industry, (2) there is fear in the community about aviation safety during Covid-19 so it is necessary to create a positive image, and (3) develop brand image Airports in Indonesia are one of the tools to increase investment. Accelerating airport development in Indonesia as well as improving public perceptions are at the same urgency level to boost our national investment. Thus, this study aims to discover the needs to develop airport branding.

One of the factors that influence brand image of an airport is passenger satisfaction. Satisfaction is the emotional state of the customer which is one of the factors in forming a brand image (İşoraitè, 2018). Passenger satisfaction is very important for the airline business and the country's overall economic growth (Hussain et al., 2015). Measuring passenger satisfaction in the airline industry is becoming increasingly frequent and relevant due to the fact that the delivery of high quality services is essential for the survival of airlines and essential for the competitiveness of the airline industry (Hussain et al., 2015). There are several reasons for this study to analyze airport passenger satisfaction in Indonesia: 1) Satisfaction is an emotional factor of customers who need attention to create a positive brand image; 2) Withdrawing passengers during the Covid-19 pandemic, when passengers feel satisfied with airport services, they can attract other passengers; 3) As a measurement value, passenger satisfaction can be used as an evaluation of how good or quality the services are provided. This can be one of the factors that are considered in forming the right strategy in serving passengers during the Covid-19 epidemic. Thus, it is important to analyze airport passenger satisfaction in Indonesia.

Decree of the Minister of Transportation Number 129 (2015) states that services at the airport provide the best service standardised by the Minister of Transportation. During the Covid-

19 Pandemic, not all facilities can be utilized optimally because there must be a health protocol that minimizes direct interactions. Service quality is a must in serving passengers following the standards of new normal. As the effort to minimise the physical interaction, the airports need to innovate its system by implementing e-service quality (quality of electronic services). Several previous studies have shown that e-service quality affects customer satisfaction and brand image. E-service quality is very important and e-service quality has an effect on customer satisfaction (Blut et al., 2015). Indeed, it is also found to have an effect on brand image (Andrew, 2019). However, there are still few studies that discuss the role of e-service quality on its effect on satisfaction and brand image in the context of airport passengers in a country during the Covid-19 pandemic. So that this research can complement the knowledge about e-service quality which can create passenger satisfaction which can affect the brand image of airports in Indonesia.

Objectives

The scope of this research is limited to the use of e-service quality at airports in Indonesia during the Covid-19 pandemic. Therefore, this study aims to obtain a clear understanding of the relationship between the factors in e-service quality that will drive passenger satisfaction and airport brand image. This research was conducted as follows; The next section is literature related to research variables, theory, and hypothesis development. Then we demonstrate data collection and measurement. Finally, it describes the results, discussion, and managerial implications and points out limitations and recommendations for future research.

Methodology

To evaluate the research model, empirical data were collected through a survey questionnaire and then assessed using a variance-based structure equation model (SEM) using PLS software. The questionnaire was distributed through an online survey to airport passengers spread across various regions in Indonesia who have used airport e-service quality facilities. The questionnaire is divided into two parts. First, respondent characteristics consisting of gender, education, and needs. Second, the main component of the questionnaire which contains the research variable instruments. Each item is measured using a 5-point Likert scale. A total of 205 responses were obtained from the survey.

Based on the proposed research model, the three main constructs are measured by multiple items. These items were adopted or adapted from the existing literature. Brand image consists of four dimensions, namely recognition, reputation, affinity, and domain (Minar & Safitri, 2017; van

Gelder, 2004). Using a scale of strongly disagree (1) to strongly agree (5). Customer satisfaction is measured by expected and perceived indicators (Davis et al., 1998; Ananthanarayanan Parasuraman et al., 1994) with a scale of very dissatisfied (1) to very satisfied (5). E-service quality is measured by four dimensions; efficiency, fulfillment, system availability, and privacy (M. Kim et al., 2006; Ananthanarayanan Parasuraman et al., 2005) and use a scale of strongly disagree (1) to strongly agree (5).). The questionnaires are first developed in English and later translated into Indonesian. The accuracy of the translation is done by the author through proofreading. Specific items are presented in Table 2.

Questionnaires are distributed to airport passengers in Indonesia through online surveys. They are well invited to participate in research online. Before data collection, respondents in this study are willing to provide real data stated in their consents. After analysing the survey results, the descriptive statistical analysis is used to analyse respondents' demographic characteristics. Based on the results of the questionnaire distribution to 205 respondents, the demographics of the respondents are shown in Table 1.

| Variable | Description | Frequency | Percent |
|-----------|-------------|-----------|---------|
| Gender | Male | 136 | 66.3 |
| | Female | 69 | 33.7 |
| Education | SMU – D2 | 55 | 26.8 |
| | D3 | 52 | 25.4 |
| | S1/D4 | 91 | 44.4 |
| | S2 – S3 | 7 | 3.4 |
| Purpose | Business | 124 | 60.5 |
| | Personal | 67 | 32.7 |
| | Travelling | 14 | 6.8 |

Table 1. Demographics of respondents

Review of literature

Brand image

Airport image should be considered as a multidimensional phenomenon. When passengers pass through an airport, a priori, they have expectations for that airport. From a company perspective, image is the various associations that come to the mind of customers when they hear the name of a company or organization (Nguyen & Leclerc, 2011). The name or brand character of the company serves as a dominant part of the customer who communicates the brand (Bresciani

& Eppler, 2010). One of the concepts commonly used is brand image which is important to measure. Brand image is the starting point for customers to recognize a product, evaluate its quality, understand and reconcile purchase risks, and gain certain experiences and satisfaction (Nagar, 2015).

Brand image is described as the perceptions and beliefs held by customers, as reflected in the associations that exist in customer memories (Kotler & Keller, 2009). Brand image is identified as an observation about a brand that is replicated by brand relationships that are retained in the soul of the customer (Walley et al., 2007). Based on these opinions, it can be concluded that brand image is the perception and belief of customers towards a brand that is still maintained in their minds. Every airport in Indonesia needs to pay attention to the brand image factor to get positive attention from passengers. Marketing programs can generate a positive brand image by building a close relationship between the brand and image in customers' memories. Especially in the situation of the Covid-19 pandemic which demands that the airport provide maximum service to continue to maintain a positive image in the minds of passengers.

Previous research that has discussed many factors that influence brand image. Riki Wijayajaya & Tri Astuti (2018) explained that brand image is influenced by satisfaction and e-service quality which are also analyzed in this study. Andrew's research (2019) shows that there is a correlation between e-service quality, brand image, and purchase intention. Then, brand image can be influenced by customer satisfaction (Chih-Chung et al., 2012; Fakhmy, 2019). Customer satisfaction can affect brand image and loyalty intentions (Upamannu & Sankpal, 2014). Those are variables affecting brand image. In this study, brand image is analyzed with two variables, namely satisfaction and service quality in particular (e-service quality) to answer the formulation of the problem posed.

Customer satisfaction at the airport

Customers are the main focus in discussions about satisfaction and service quality. Customer satisfaction is a central concept in the context of business and management. When Customers are satisfied they tend to form a sustainable and affective commitment to their products (Park, 2017). Customer satisfaction is a key factor in building long-term relationships with Customers and obtaining repurchase intentions (M. J. Kim, 2011). Customers may be satisfied with the product or service, experience, purchase decision, salesperson, shop, service provider, attributes or one of these factors (Upamannu & Sankpal, 2014). In the most general concept of satisfaction, satisfaction is a satisfied response from customers about services and products (Oliver & Sharpe, 1997). Overall satisfaction is created on the total customer experience based on the

quality and information attributes that are under the control of the service provider (Yoon, 2010). Customer satisfaction refers to the overall evaluation on the basis of the total purchase experience and customer consumption of companies' goods / services from time to time (Mohammed & Rashid, 2018). The better quality the services provided by the airport, the higher passengers' satisfaction is. So it can be concluded that satisfaction refers to the emotional state that results from a passenger's evaluation and response of the services.

Previous studies have proven the effect of satisfaction on brand image. Satisfaction and service quality are correlated which then affects the brand image (Setyadi et al., 2017). Customer satisfaction affects brand image as seen from brand strength, brand uniqueness, and brand preference (Fakhmy, 2019). Other studies have shown that Customer satisfaction affects brand image and intention to be loyal (Upamannu & Sankpal, 2014). Then, other research proves that satisfaction and brand image together can increase customer loyalty (Wahyuni & Irfani, 2017). In the context of the use of health services, research by Khodadad Hosseini & Behboudi (2017) shows that there is a relationship between brand image, brand trust and satisfaction. These results show that there is an effect of satisfaction on brand image. Thus, this study examines the effect of passengers' satisfaction regarding the brand image at airports in Indonesia during the Covid-19 pandemic.

H1. Customer satisfaction has a positive and significant effect on the brand image of airports in Indonesia

E-service quality

Service quality is a basic concept in the concept of e-service quality. Perceived service quality is defined as a Customer's assessment of the overall products and services provided (Parasuraman et al., 1988). The traditional service quality (SERVQUAL) or "gap analysis model" was developed by Parasuraman, Zeithaml and Berry in the early 1980s, which is based on the view that customers judge service quality by comparing service expectations with perceived service received from a particular service provider (Anantharathan Parasuraman et al., 1985). Service quality is defined as a customer assessment of the superiority or features of a product or service as a whole (V A Zeithaml et al., 2011).

The concept of e-service quality or online service quality relies in its interaction with the website such as which website facilities are efficient and effective for shopping, purchasing and delivery (Ananthanarayanan Parasuraman et al., 2005). The paradigm shift from a good-centered logic to a service-dominant shows the need for companies to provide high levels of electronic service quality (e-service quality) to achieve superior performance (Klaus & Maklan, 2012).

Previous research has analyzed the important role of e-service quality in providing services to customers and then established a scale measurement of e-service quality (Ananthanarayanan Parasuraman et al., 2005; Valarie A. Zeithaml, 2002). The delivery of consistently high e-service quality has become a major source of competitive advantage (Fassnacht & Koese, 2006). E-service quality is important to analyze in this study because during the Covid-19 Pandemic it demands limited direct interaction from which solved by utilizing e-service quality. Thus, this study tries to explain the concept and discover the role of e-service quality in influencing satisfaction and brand image at airports in Indonesia during the Covid-19 Pandemic.

E-service quality that is provided according to what the passengers perceive will create satisfaction. Previous studies have proven the effect of e-service quality on satisfaction. The perceived service quality has a significant effect on customer satisfaction (Kassim, 2010). E-service quality, information quality, and perceived convenience were found to have an effect on satisfaction (Saiful Riza, 2017). Previous research has shown that the dimensions of e-service quality, namely outcome quality, have an effect on satisfaction (Kao & Lin, 2016). Previous research results show the effect of e-service quality on satisfaction (Rita et al., 2019; Rodríguez et al., 2020). E-service quality which is assessed from some following variables of online service quality (web information quality, web interaction quality, web design quality, reliability, responsiveness, assurance, and empathy) which has an effect on customer satisfaction (Anggraeni & Yasa, 2012). From several previous studies, it shows that there is an effect of e-service quality on satisfaction.

H2. E-service quality has a positive and significant effect on customer satisfaction at airports in Indonesia

Previous studies have proven the effect of e-service quality on brand image. Service quality and satisfaction are mutually correlated which then affects brand image (Setyadi et al., 2017). Research by Andrew (2019) shows that there is a correlation between e-service quality and brand image. Then, other research shows that brand image mediates the effect of e-service quality on e-CRM quality (Setiawan & Annie, 2019). Then, research by Riki Wijayajaya & Tri Astuti (2018) shows that e-service quality has a positive effect on customer satisfaction. Furthermore, customer satisfaction has a positive effect on trust and brand image. From these studies it shows that e-service quality has an effect on brand image. Currently, e-service quality is a must-have facility at every airport in Indonesia by now. This is due to social distancing during the Covid-19 pandemic, so the utilization of e-service quality must be maximized. E-service quality that can be utilized optimally will be able to form a positive image at an airport in Indonesia.

H3. E-service quality has a positive and significant effect on the brand image of airports in Indonesia

H4. E-service quality has a positive and significant effect on brand image through customer satisfaction at airports in Indonesia

Findings

Results

This research is a quantitative study in analysing the important war of e-service quality at airports during the Covid-19 pandemic and its effect on satisfaction and brand image. The analysis technique used is Structural Equation Modelling (SEM-PLS) based on variance / partial least square (SEM-PLS). SEM-PLS is recognized for estimating path coefficients in structural models (Hair et al., 2017). There are two stages in the SEM-PLS analysis, namely by analysing the measurement model and analysing the structure model. The SEM-PLS analysis technique is applied because it allows researchers to analyse latent constructs with medium and small sample sizes, and when the data is distributed abnormally (Chin et al., 2008).

Measurement Model

In evaluating a measurement model, the first step taken is to check the validity and reliability of the construct by evaluating the average variance extracted (AVE), outer loading, composite reliability (CR) and Cronbach's alpha. The next step is evaluating the validity of the discriminant by comparing the individual construct AVE and all other constructs, which is commonly called the Fornell-Larcker criterion. The results of the measurement model are shown in Table 2 and Table 3.

The results of the measurement of loading factors show that all loading factors have a value above the cut-off value determined by 0.7 so that all items are received. Composite reliability (CR) meets values above 0.7. Average variance extracted (AVE) also has a value above 0.5 (Hair et al., 2017). Thus, convergent validity is accepted. The AVE square root of all the constructs is more than the correlation value between the constructs, indicating that the discriminant validity of the variable constructs is accepted. These results indicate that the measurement model has met the criteria.

| Constructs | Item | Loading | α | CR | AVE |
|-------------|--|---------|----------|-------|-------|
| Brand image | Recognition | | 0.928 | 0.965 | 0.933 |
| | The level of recognition of airports that comply with the Health protocol in serving passengers (REC_01) | 0.967 | | | |
| | Design of premises that adhere to Health protocol and are easily recognized (REV_02) | 0.965 | | | |
| | Reputation | | 0.952 | 0.977 | 0.955 |

| Constructs | Item | Loading | α | CR | AVE |
|-----------------------|--|---------|----------|-------|-------|
| | Customer perceptions of airport services that comply with health protocol (REP_01) | 0.977 | | | |
| | Airport customer confidence level (REP_02) | 0.977 | | | |
| | Affinity | | 0.882 | 0.944 | 0.894 |
| | Services that comply with validity protocols have become a lifestyle (AFF_01) | 0.944 | | | |
| | Services provided by airports are in accordance with customer perceptions (AFF_02) | 0.947 | | | |
| | Domain | | 0.926 | 0.964 | 0.931 |
| | Using all airport facilities (DOM_01) | 0.964 | | | |
| | The airport facilities used comply with the Health protocol (DOM_02) | 0.966 | | | |
| Customer Satisfaction | Satisfaction | | | | |
| | Expected service (SAT_01) | 0.966 | 0.927 | 0.965 | 0.932 |
| | Perceived service (SAT_02) | 0.964 | | | |
| E-service quality | Efficiency | | 0.941 | 0.952 | 0.770 |
| | Airports have apps, websites, or other electronic services that make it easy to find what you need. (EFF_01) | 0.820 | | | |
| | Easy-to-use electronic services (EFF_02) | 0.859 | | | |
| | Electronic services make it possible to complete transactions quickly (EFF_03) | 0.926 | | | |
| | Information is well organized. (EFF_04) | 0.879 | | | |
| | Electronic services make it possible to access them quickly. (EFF_05) | 0.875 | | | |
| | The airport's electronic services are well organized (EFF_06) | 0.903 | | | |
| | Fulfilment | | 0.938 | 0.970 | 0.941 |
| | Electronic services can make service delivery fast (FUL_01) | 0.971 | | | |
| | All activities can be done with electronic services provided by the airport (FUL_02) | 0.970 | | | |
| | System availability | | 0.934 | 0.958 | 0.884 |
| | Airport electronic services are always available whenever desired (AVA_01) | 0.961 | | | |
| | Electronic services can be operated smoothly (AVA_02) | 0.926 | | | |
| | Electronic services have never occurred interruptions or errors (AVA_03) | 0.932 | | | |
| | Privacy | | 0.962 | 0.970 | 0.868 |
| | I feel safe providing sensitive information (e.g., credit card details) for online transactions (PRI_01) | 0.954 | | | |
| | Electronic services are equipped with adequate security features (PRI_02) | 0.949 | | | |
| | The airport does not provide personal information to others (PRI_03) | 0.913 | | | |
| | Airport secures information about customer transaction activities (PRI_04) | 0.889 | | | |
| | The airport makes an appropriate statement regarding the settlement of the transaction. (PRI_05) | 0.951 | | | |

Table 2. Measurement items

| | REC | REP | AFF | DOM | SAT | EFF | FUL | AVA | PRI |
|-----|-------|-------|-------|-----|-----|-----|-----|-----|-----|
| REC | 0.966 | | | | | | | | |
| REP | 0.893 | 0.977 | | | | | | | |
| AFF | 0.926 | 0.930 | 0.946 | | | | | | |

| | | | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| DOM | 0.906 | 0.824 | 0.917 | 0.965 | | | | | |
| SAT | 0.948 | 0.861 | 0.883 | 0.873 | 0.965 | | | | |
| EFF | 0.909 | 0.806 | 0.874 | 0.895 | 0.861 | 0.927 | | | |
| FUL | 0.897 | 0.970 | 0.935 | 0.851 | 0.866 | 0.815 | 0.970 | | |
| AVA | 0.953 | 0.906 | 0.964 | 0.939 | 0.910 | 0.892 | 0.908 | 0.968 | |
| PRI | 0.933 | 0.851 | 0.960 | 0.933 | 0.892 | 0.895 | 0.905 | 0.957 | 0.962 |

Note. REC: Recognition; REP: Reputation; AFF: Affinity; DOM: Domain; SAT: Satisfaction; EFF: Efficiency; FUL: Fulfilment; AVA: System availability; PRI: Privacy

Table 3. Fornell-Larcker criteria (Discriminant validity)

Structural Model

After evaluating the measurement model, the next step is to analyze the structural model. Prior to it, analysis of F2, R2, and Q2 are firstly discovered. In the F2 analysis, the variable that has moderate influence (> 0.02) on brand image is satisfaction (0.125). Then the variable that has a big influence (> 0.35) is e-service quality on brand image (1.376) and on satisfaction (9,127) (Hair et al., 2017). In evaluating R2, Chin et al. (2008) classified R2 values into three groups, weak ($R^2 = 0.19$), moderate ($R^2 = 0.33$) and substantial ($R^2 = 0.76$). E-service quality and customer satisfaction are able to explain the brand image at a substantial level (0.958). E-service quality is able to explain satisfaction at a substantial level (0.782). Furthermore, in measuring the predictive power of constructs, Chin et al. (2008) suggest the use of Q2 analysis. The results of this test indicate that the Q2 value of all constructs has a positive value and is greater than 0. That is, these findings indicate that the proposed model has predictive power.

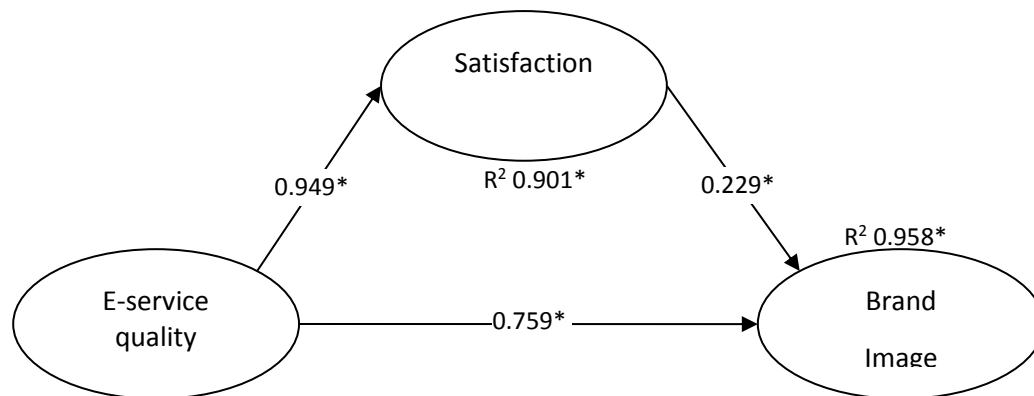
The next step is to test the hypothesis. The structural model test shows the effect of latent variables with latent variables. Table 4 shows the estimated direct effect path coefficients of all the variables tested as significant.

| | Path Coefficient | T Statistics | P Value |
|--|------------------|--------------|---------|
| H1. E-service quality -> Brand image | 0,759 | 11,550 | 0.000 |
| H2. E-service quality -> Satisfaction | 0,949 | 101,534 | 0.000 |
| H3. Satisfaction -> Brand image | 0,229 | 3,379 | 0.001 |
| H4. E-service quality -> Satisfaction -> Brand image | 0,217 | 3,360 | 0.001 |

Table 4. Hypothesis testing result

Based on the results of hypothesis testing, it shows that e-service quality has a positive and significant effect on brand image ($\beta = 0.759$; sig. 0.000), so the first hypothesis is accepted. E-service quality also has a positive and significant effect on customer satisfaction ($\beta = 0.949$; sig. 0.000), so the second hypothesis is accepted. Satisfaction has a positive and significant effect on

brand image ($\beta = 0.229$; sig. 0.001), so that the third hypothesis is accepted. Testing the indirect effect shows that e-service quality has a positive and significant effect on brand image through customer satisfaction ($\beta = 0.217$; sig. 0.001), so hypothesis four is accepted. These results indicate that all hypotheses are accepted. Therefore, this research model succeeds in revealing the importance of e-service quality in influencing satisfaction and brand image, either directly or indirectly. The results of the direct influence between the variables and R2 values are depicted in Figure 2.



Note. Significance * $p < .01$.

Figure 2. Model Results

Discussion

The results of this study indicate that brand image is influenced by e-service quality. The proposed model is supported by empirical data. All hypotheses are accepted. The coefficients in Fig. 2 shows that brand image is more dominantly influenced by e-service quality than by customer satisfaction. The results of this study prove that e-service quality plays an important role in influencing brand image either directly or through satisfaction. The paradigm shift from a well-centred logic to a service-dominant shows the need for companies to provide high-level e-service quality to achieve superior performance (Klaus & Maklan, 2012). The delivery of consistently high e-service quality has become a major source of competitive advantage (Fassnacht & Koese, 2006). These results prove that e-service quality is a must in an airport. The delivery of electronic services at an airport will make it easier for passengers to meet the needs of flight services, especially during the Covid-19 period which requires restrictions on direct interaction. This can be accommodated with e-service quality.

In testing the first hypothesis, it shows that e-service quality has a positive and significant effect on brand image. The better the e-service quality provided by the airport during the Covid-19 pandemic, the more positive the airport's brand image will be. E-service quality is a must-have

facility at every airport in Indonesia. This is because the implementation of social distancing and health protocols in the Covid-19 pandemic requires maximum utilization of e-service quality. This will be able to form a positive image at an airport in Indonesia because it complies with health protocols in serving passengers and e-service quality provided by airports in accordance with customer perceptions in the Covid-19 pandemic. The results of this study indicate that there is a relationship between E-service quality and brand image (Andrew, 2019; Setyadi et al., 2017). This research has successfully proven the important role of e-service quality in building airport brand image during the Covid-19 pandemic.

Based on the results of testing the second hypothesis, it shows that e-service quality has a positive and significant effect on customer satisfaction. In realizing high-quality electronic services that lead to satisfaction, the airport must be able to identify passenger needs so that they can know the level of perception and expectation of the quality of electronic services provided by airports. Previous research results show the effect of e-service quality on satisfaction (Rita et al., 2019; Rodríguez et al., 2020). E-service quality provided by airports in accordance with passenger perceptions will create satisfaction. Thus, this study complements the previous literature on the effect of e-service quality on customer satisfaction, especially in the context of airport languages.

The results of testing the third hypothesis show that there is an effect of satisfaction on brand image. The higher the airport passenger satisfaction, the more positive the airport brand image will be. The results of this study are in line with previous studies that show the effect of satisfaction on brand image (Setyadi et al., 2017; Upamannyu & Sankpal, 2014). Customer satisfaction refers to the overall evaluation on the basis of the total purchase experience and customer consumption of companies that provide goods / services from time to time (Mohammed & Rashid, 2018). Airports in Indonesia need to provide quality services to passengers who are able to meet passenger perceptions. Then, evaluate whether satisfied with the services provided by the airport. The results of this study complement the previous literature on the effect of satisfaction on brand image. However, this study proves the effect of passenger satisfaction on brand image at airports in Indonesia during the Covid-19 pandemic.

In testing the fourth hypothesis, it shows that e-service quality affects brand image through satisfaction. E-service quality that is able to create passenger satisfaction can affect the airport's brand image. Service quality and satisfaction are mutually correlated which then affects brand image (Setyadi et al., 2017). E-service quality has a positive effect on Customer satisfaction which then has a positive effect on trust and brand image (Riki Wijayajaya & Tri Astuti, 2018). E-service quality provided by airports to passengers must be of high quality and meet the perceptions of

passengers so as to create satisfaction. If this is given consistently it can form a positive image of the airport. Especially during the Covid-19 pandemic. E-service quality that is provided must comply with minimizing direct interaction, because this is the main requirement for passengers to get service at the airport.

Suggestions

This research contributes to the literature in several ways. This study identifies and confirms that factors in e-service quality are important factors for increasing satisfaction and brand image. The initial concept of e-service quality shows the important role of e-service quality in providing services to customers and then forming a measurement scale for e-service quality (Ananthanarayanan Parasuraman et al., 2005; Valarie A. Zeithaml, 2002). But in the context of airports during the Covid-19 pandemic, we adjusted the e-servqual attribute which shows the suitability and important role of these attributes in influencing satisfaction and brand image. This means that this research has succeeded in establishing the e-service quality attributes of airports during the Covid-19 pandemic.

The findings of this study also provide some important practical implications for airport practitioners. This study reveals that e-service quality is an important factor in influencing satisfaction and brand image. Airports in designing e-service quality are advised to pay more attention to efficiency in the use of e-service quality, meet customer needs, provide system readiness, and maintain customer privacy. This is necessary to make interactions easier, smoother, more efficient, and provide services to customers during the Covid-19 pandemic. The paradigm shift from a good-centred logic to a service-dominant shows the need for companies to provide high-level e-service quality to achieve superior performance (Klaus & Maklan, 2012). This research can contribute to an effective e-service quality process for passengers and other related parties.

Conclusion

Overall, this study has successfully proven the important role of e-service quality in influencing customer satisfaction and brand image at airports during the Covid-19 pandemic. The implementation of e-service quality has helped prove the effect on satisfaction and brand image. E-service quality at airports during the Covid-19 pandemic must meet the factors of efficiency, fulfilment, system availability, and privacy. Through these factors, new dimensions and

perspectives have been investigated in this study. Decision makers can identify these factors and modify them to improve airport satisfaction and brand image. The results showed the importance of e-service quality in influencing brand image either directly or through satisfaction. The attributes of efficiency, fulfilment, system availability, and privacy are considered important for airports in improving e-service quality. This attribute must also be able to ease customers getting the airport services and must also be able to meet security needs during the Covid-19 pandemic.

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