THE ANALYSIS OF HEALTH ALERT CARD (HAC) DISTRIBUTION AND BODY-TEMPERATURE CHECKING TOWARDS CUSTOMER’S SATISFACTION AT SOEKARNO-HATTA AIRPORT IN PANDEMIC COVID-19 ERA

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Abstract. This research aims at identifying the impact of management strategies and service quality on customer’s satisfaction through standardization. This survey was conducted using questionnaire from 100 passengers of Soekarno-Hatta Airport, the transportation services industry. The questionnaire was collected, and the data was analyzed using PLS-SEM. The results show the Integration of management strategies with standardization. In fact, standardization is very important to improve service quality; moreover, service quality has a higher impact on service quality. Customer’s satisfaction has a significant impact on standardization. The findings of this study improve the integrated framework for analyzing the role of standard management strategies and service quality to customer’s satisfaction.

Keywords: Management Strategy, Service Quality, Customer’s satisfaction, Covid-19, HAC

Introduction
Covid-19 outbreak has made the world worried, including Indonesia. Covid-19 is a new type of virus so that many parties do not know and do not understand how to deal with the virus. As the Coronavirus or Covid-19 has become an epidemic in hundreds of countries, so the government of the Republic of Indonesia issued a health protocol. The protocol has been implemented throughout Indonesia by the government centrally guided by the Indonesian Ministry of Health (2020). Then, the health protocol must also be applied in places of transportation services, one of which is the airport. The Ministry of Health has also issued special rules for airports, such as international arrivals that need to comply the Circular from Minister of Health Number HK.02.01 / MENKES / 313/2020 concerning health protocols for the handling of Indonesian citizens and the arrival of foreigners at state and regional entrances in the situation of PSBB (Large-Scale Social Restrictions). Besides, related to domestic arrivals (specifically at Soekarno-Hatta Airport), provisions were enforced according to the Gubernatorial Regulation of DKI Jakarta No. 47/2020 regarding the restrictions on activities leaving and/or entering the province of DKI Jakarta in preventing the spread of Covid-19 (Mayasari, n.d.).

The President Director of PT Angkasa Pura II (2016) stated that all procedures could be carried out properly at the airports in line with the synergy among stakeholders (Ega Alfreda, n.d.). The efforts of Soekarno-Hatta Airport in carrying out procedures for preventing the spread of Covid-19 are complete, such as various procedures that have recently been performed. For example, spraying the entire airport area with disinfectant, providing hand sanitizers in every corner, checking body temperature, filling Health Alert Card (HAC), applying social distancing, and so on have been implemented. Then, this study discusses more deeply the strategy of indoor or outdoor body temperature checking. In addition, there are two systems to check the body temperature, namely thermo scanner; thermo gun; and HAC-filling. The HAC can facilitate airport’s staffs to
identify both domestic and international passengers suspected by Covid-19. Since the body-temperature checking and HAC-filling involve passengers, this study needs to conduct further research on the two health procedures whether these two health strategies or procedures have met the standardization for passengers. Thus, this research would also like to identify how customer’s satisfaction influences both strategies. The management strategy undertaken by the airport can affect service quality and standardization of customer’s satisfaction. In this study, the observations were conducted on all respondents, the passengers, to find out the analysis of Health Alert Card (HAC) filling strategy and body-temperature checking towards customer’s satisfaction at Soekarno-Hatta Airport during PSBB.

Literature Review
Management Strategy
There are several kinds in understanding the strategy as stated by experts in their respective workbooks. Strategy comes from the Greek word, Strategos, which is a composite of Stratos that means army, ego, and the leader. Strategy, according to (Nickols, 2016), refers to a general plan of action to achieve one's goals and objectives. This means that the strategy refers to a general plan of action to achieve a goal or an objective. A strategy has a basis or scheme to achieve the intended target. Moreover, strategic management is the process of planning objectives, improving policies and plans to achieve these objectives as well as allocating resources for the implementation of policies and planning the achievement of organizational goals. Management strategy combines the activities of various functional parts of a business to achieve organizational goals. The latest approach to strategic management, according to (Ferreira, Fernandes, & Ratten, 2016), tends to consider strategic alliances (as sources of knowledge) and intellectual capital (human, structural and relational capital) as the main sources for sustainable competitive advantages. The strategic management sector has developed a nuanced approach to understand how companies are created; organized; and growing, how they innovate and compete, and how managers manage (Teece, 2017).

In this section, the researcher discusses how the management strategy of the airport in charging and distributing HAC as stipulated by the Director-General of Civil Aviation in AU.201 / 6/9 / DRJU.DKP.2020 dated March 30th, 2020, regarding completing Health Alert Card (HAC). The HAC can be distributed at the departure gates of the airport and check-in desks so that passengers can fill up as soon as possible. The distribution of HAC to domestic-route passengers at the departure gates of the airport as well as HAC reception at the destination gates of the airport is important. The airports under the company consistently carry out procedures set by the regulators to overcome the spread of Covid-19 in the country. Altogether with the Ministry of Maritime Affairs and Fisheries, the two ministries support various efforts to overcome and detect the spread of Covid-19, one of which is through the charging of HAC on domestic passengers (Muhammad Awaluddin, Year). Passengers of domestic routes from areas affected by Covid-19 are required to fill in the HAC and submit it to the designated officers from Ministry of Maritime Affairs and Fisheries at the domestic arrival terminals. The Ministry of Maritime Affairs and Fisheries states that there are no procedures for the handover of HAC to the passengers on domestic routes arriving at Soekarno-Hatta Airport. This card includes a history of passengers’ travels in the past
fourteen days, complaints related to health experienced at this time, and other data. Passengers will later hold and fill this card, and if they want to seek treatment at a health facility, they can also submit the filled HAC. International arrivals are required to fill in a HAC upon arrivals at Soekarno-Hatta Airport as a health card and to make it easy for the assigned officers from Ministry of Maritime Affairs and Fisheries to identify passengers suspected by Covid-19.

**Service Quality**

Service quality is a comparison between the customer's expectations and the service he or she receives. Service quality is a service to create customer’s satisfaction and loyalty. In the service marketing literature, service quality often reflects customer’s perceptions and the assessment of the value of a product or service (Yuan & Soocheong, 2008). Good service quality also greatly influences the perception of the customers themselves. Therefore, the need to explore the quality of airport services and their components is clearer in the relevant transportation and marketing literature (Fodness & Murray, 2007). Airport management usually measures the quality of airport services in an objective way to identify service gaps that threaten the overall performance of the airport, which is obtained through various measurement systems known as benchmarking (Francis, Humphreys, & Fry, 2002). A positive perception of service quality creates favorable behavioral intentions to repurchase or reuse, engage in positive word of mouth, support products or services, value the price sensitivity, and ultimately, be loyal to the company. Conversely, the intention of unfavorable behavior is related to negative actions such as switching (Bigovic & Prašnikar, 2015). In this discussion of service quality, the airport determines regulations for passengers arriving from abroad or traveling in the domestic areas. In addition to having to prepare complete documents, they are also required to fill out the Health Alert Card for the Indonesian Ministry of Health. To facilitate and avoid the queue, it is recommended to use an Electronic Health Alert Card which can be accessed through the E-HAC application on Android smartphones before traveling. For those who do not have the E-HAC application, a Health Alert Card will be given at the departure gates of the airport or on the plane before landing.

**Standardization**

Standardization is a basic modernist concept, based on the understanding of language as an autonomous and unified system whose main function is an effective and accurate transmission of information (Deumert, 2010). The procedure applied by Soekarno-Hatta Airport has been standardized as stipulated by the Decree of Minister of Health Number: HK.01.07 / MENKES / 104/2020 concerning the determination of Novel Coronavirus Infection (2019-nCoV) as a disease that can cause plague and its mitigation efforts. Some of the early detections and responses at the entrance of the state, among others, consist of monitoring the arrival of people through observing body temperature using a mass temperature scanner (thermal scanner) or an infrared thermometer as well as through visual observations of travelers who show the characteristics of patients with COVID-19 and checking the health documents or HAC on people. If a traveler is found to have detected a fever through a thermal scanner or infrared thermometer, further observations and interviews are going to be conducted. After that, the criteria in a glimpse by identifying other passengers at risk (close contact) using HAC, granting HAC and risk communication, facilitating notification ≤ 24 hours.
to the Directorate General of P2P through PHEOC are passed to the Provincial Health Office and are recorded using a notification form. Notifications to the Office of Health are intended to coordinate close contact monitoring. Then, there are criteria for monitoring by the management in regards to the established diagnosis, the HAC facilitator, and risk communication about Covid-19 infection, during the incubation period. If the symptoms are getting worse, the passengers can immediately inform the nearest health care facility by bringing and showing the HAC to the health workers. In addition, patients will be given training for self-isolation (restricting themselves at home from the society). The Ministry of Maritime Affairs and Fisheries has identified a list of aircraft passengers. This is done if the patient experiences a change in clinical indication according to the patient's operations in supervision, the health workers will observe those who have close contact with others with 24-hour notification to the Provincial and District or City Health Offices for monitoring them at their residence in accordance with data from the HAC. Passengers and other crews who are not at risk are also subjected to the temperature check using a thermal scanner, the provision of HAC, and risk communication.

Customer’s Satisfaction
Customer’s satisfaction is a measurement of the feeling that arises after a customer uses the products or services offered and compares it with the customer’s expectations. Measuring customer’s satisfaction is a key factor for improving service quality in airlines due to the intangible nature of the product and the fact that customers only feel two elements like general results and additional services (Rahim, 2017). In a competitive industry such as the aviation industry, it is important for companies not only to properly understand what their customers want and expect but also to manage their resources in meeting customer’s expectations appropriately (Chow, 2015). The quality of service that must be delivered to the customers has been considered as an important factor for the success of the service provider in terms of a close relationship with customer’s satisfaction (Rasyida, Mijiya Ukhaq, Setiowati, & Setyorini, 2016). (Merkert & Pearson, 2015) state that there is a relationship between customer’s satisfaction and ongoing business because customer’s satisfaction does not always lead to customer’s loyalty. Therefore, customer’s loyalty is more important since it brings repeat for the business and increases operator’s revenue.

Research Model and Hypothesis
Based on the theoretical framework, the following research model was developed.

Management Strategy
Service quality

Standardization

Customer's satisfaction

Figure 1. Research Model

H1 Effect of Management Strategy on Standardization

Management strategy focuses on organizational goals, improves policies and plans for objectives, and allocates resources to implement policies and plan the acquisition of standardized goals. Control and review features are important in every management
strategy process for measuring and evaluating the performance of sustainability actions (Epstein & Roy, 2007). Standardized work practices indicate how jobs should be performed. The goal is to reduce the variance associated with each task and, thereby, improve overall team effectiveness (Gilson, Mathieu, Shalley, & Ruddy, 2005).

**H2 Effect of Service Quality on Standardization**

Service quality is a part of the management strategies so that all services provided must meet good quality and can satisfy customers. Customer assessment is based on customer’s satisfaction itself and, therefore, service quality must have a fairly good standard of everything. By taking this idea one step further, it also means to observe the possibility of standardization and adjusting technical quality (results) as well. (Kasiri, Guan Cheng, Sambasivan, & Sidin, 2017)

**H3 Effect of Standardization on Customer’s Satisfaction**

Management Strategy is the process of analyzing and creating strategies as well as continuously implementing, monitoring, and creating a good quality of service used by organizations with the aim of achieving and maintaining their competitive advantage. Hence, it can provide satisfaction to customers. (de Keyser & Lariviere, 2014) contend that the positive effect on customer’s satisfaction is based on the quality of technical and functional services. In fact, it is when functional and technical quality has a vital effect on customer’s satisfaction in providing high-quality services. Therefore, to be able to improve the quality of service, the different strategies are used so that they can evaluate the effects of each strategy on different aspects of service quality. To maintain reliability and be free from defects, standardization must be established. In addition, there are other benefits of standardization, including facilitating contracts, controlling implementation and setting prices in providing services, protecting consumers, and prioritizing trust and satisfaction with consumers. (Kasiri et al., 2017).

**Research Method**

This study used quantitative method incorporating a survey approach using a questionnaire. This data was processed using SmartPLS software version 3. The population in this study was people who have used the Health Alert Card (HAC) manually and have undergone body-temperature checking with a thermal scanner and a thermometer gun. Sampling technique in this study used the probability sampling with simple random sampling method. The objects of the research were the airlines’ passengers at Soekarno-Hatta Airport during PSBB. The data was collected through questionnaire distribution. In this study, the independent variable is Service Management (X1), Service Quality (X2), and the dependent variable is Standardization (Y), and the control variable is Customer’s satisfaction (Z). Data collection through survey was carried out by distributing questionnaires to respondents; then, concluding the answers given by respondents. The scale used in this study was the Likert scale. Likert scale items were arranged based on customer’s experience.

**Discussion and Result**

Discussion
By measuring and analyzing customer’s satisfaction, it can be ensured that every strategy that has been carried out works to improve the safety and comfort of passengers in the pandemic era. By studying the attributes that contribute to a high level of customer’s satisfaction, it can, then, refine the strategies to focus on improving customer’s experience, loyalty, and repeat for business. Making plans to manage customer’s satisfaction is essential. A comprehensive plan that outlines initiatives, milestones and budget increases customer’s satisfaction which is a priority at Soekarno-Hatta Airport. Without strategic direction, efforts may fail. The study describes how Soekarno-Hatta Airport's strategy in trying to prevent Covid-19 at the post by requiring the prospective passenger to show the travel documents, such as flight tickets, identification, free Covid-19 certificate, travel certificate, and other documents that must be met in accordance with SE No.4 / 2020. Still, at the same post, prospective aircraft passengers must fill out a Health Alert Card (HAC) and an epidemiological inquiry form given by the personnel from Ministry of Maritime Affairs and Fisheries. If all the files are complete, and the HAC and epidemiology forms have been filled out, the prospective passengers go to the second examination table. On the examination table, all files, namely the HAC and epidemiological inquiry forms, are rechecked by officers from the Ministry of Maritime Affairs and Fisheries. After being declared complete, prospective passengers will receive a letter of clearance from personnel of the Ministry of Maritime Affairs and Fisheries. Then, they are equipped with a letter of clearance and all the files. Next, the prospective passengers go to the check-in counter to get a boarding pass. After the check-in counter, the passengers go to the security check point 2. At this stage, aviation security personnel will check the letter of clearance, boarding passes, and personal identity held by prospective aircraft passengers. In the last stage, the passengers head to the boarding lounge.

One of the strategies carried out by Soekarno-Hatta Airport is to influence Covid-19 prevention, so HAC can identify passengers suspected by Covid-19. In addition, checking the body temperature at the airport is also very influential on the safety of passengers because it is done through two systems, specifically checking body temperature with a thermometer gun and a thermal scanner. That strategy involves passengers, so it must be carried out in accordance with standardization to get customer’s satisfaction. Then, good service quality will also get a high value of customer’s satisfaction. This is the importance of the relationship among management strategy, service quality, and standardization of customer’s satisfaction (Kasiri et al., 2017). A study by (Lien, 2001) compares the relationship between service quality measures and customer’s satisfaction. The importance lies on mediating role of satisfaction between measures of service quality and customer’s loyalty. Both of these dimensions have a significant relationship between functional quality and loyalty.

<table>
<thead>
<tr>
<th>Table 1. Measurement of Reliability Level</th>
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<tr>
<td>Cronbach’s Alpha</td>
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<td>------------------</td>
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<tr>
<td>CUSTOMER’S SATISFACTION</td>
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</table>
Internal consistency reliability can be used to measure how adequate an indicator can assess its latent construct. To measure the level of reliability, the tools or indicators that can be used are composite reliability and Cronbach’s alpha. Composite reliability values of 0.6 - 0.7 are considered to have good reliability, and the expected Cronbach's alpha value is above 0.7. Based on table 1, it shows that the value of Cronbach's alpha and composite reliability is above 0.7, so it can be concluded that the latent construct of this model has a good level of reliability. To measure the level of validity, AVE (Average Variance Extracted) indicator can be used, and AVE value is expected to be greater than 0.5. Based on the results of the table above, all latent constructs have an AVE value greater than 0.5, it can be concluded that the latent constructs have good validity.

Table 2. R Square and Q^2 Values

<table>
<thead>
<tr>
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<th>R Square</th>
<th>Q^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOMER SATISFACTION</td>
<td>0.212</td>
<td>0.150</td>
</tr>
<tr>
<td>STANDARDIZATION</td>
<td>0.734</td>
<td>0.388</td>
</tr>
</tbody>
</table>

the first phase is to see the coefficient of determination (R Square). R^2 is a method used to assess how much the dependent variable can be explained by the independent variable. Based on (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014), R Square value between 0.25 and 0.50 is conditioned as a weak relationship, a value between 0.50 and 0.75 is conditioned as a moderate relationship, and a value above 0.75 is said to be high. Based on table 2, the relationship between standardization and customer’s satisfaction is fairly weak, which is 21.2% meaning that standardization can explain customer’s satisfaction. However, the relationship between standardization with service quality and management strategy is fairly high, which is 73.4% meaning that standardization can be explained by service quality and management strategy. The second phase is to look at cross-validated redundancy (Q square). Q square is used to assess predictive relevance. If Q square value is greater than 0, this indicates that the index has an accurate predictive relevance. If Q square value is less than 0, the model has less predictive relevance. Table 2 shows that all models have Q square value of more than 0 indicating that the exogenous construct has predictive power or relevance to the endogenous construct.

Table 3. Effect Size Values (f^2)

<table>
<thead>
<tr>
<th></th>
<th>CUSTOMER'S SATISFACTION</th>
<th>STANDARDIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVICE QUALITY</td>
<td></td>
<td>0.237</td>
</tr>
</tbody>
</table>


In this case, it is evident to also see the size of the influence among variables using effect size or f-square. There are several categories of f^2 values that are used to see the effect. Square-value of 0.02 is categorized as small, 0.15 is categorized as moderate, and 0.35 is categorized as large. F-square values of less than 0.02 can be ignored or considered uninfluential. Based on the results of the table 3, the service quality variable has an f-square value of 0.237 which can be categorized into a medium indicator, the standardization variable has an f-square value of 0.269 categorized into the medium category and management strategy with an f-square value of 0.248 is in a small category.

**Table 4. Path Coefficients**

<table>
<thead>
<tr>
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<th>Customer's satisfaction</th>
<th>Standardization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td></td>
<td>0.444</td>
</tr>
<tr>
<td>Standardization</td>
<td>0.460</td>
<td></td>
</tr>
<tr>
<td>Management Strategy</td>
<td>0.453</td>
<td></td>
</tr>
</tbody>
</table>

the significance and strength of the relationship can be seen by measuring the path coefficients among constructs and also testing the hypothesis. The path coefficients range from -1 to +1. As it gets closer to +1, the relationship between the two constructs is getting stronger. Relationships that are closer to -1 indicate that the it is negative. Table 4 presents that the value of path coefficients is close to +1, so it can be concluded that the relationship among constructs is getting stronger.

**Bootstrapping**

In the bootstrapping test, the resulting t-statistics and p-values for each path of the relationship are used to test the hypothesis. The p-value of each model is compared with the level of precision or (α). In this case, the level of precision used is 5% or 0.05. If the p-value is less than 0.05 (p-value <α), H0 is accepted, and Ha is rejected.

**Table 5. Bootstrapping Test**

<table>
<thead>
<tr>
<th></th>
<th>Original (O)</th>
<th>Sample</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>0.444</td>
<td>0.099</td>
<td>4.471</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Standardization</td>
<td>0.460</td>
<td>0.112</td>
<td>4.123</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis 1
Based on table 5, the p-value between management strategy and standardization is 0.000, which is much smaller than 0.05 (p-value < α). It can be concluded that H0 is accepted, and Ha is rejected. Then, there is a significant influence or relationship between management strategy and standardization.

Hypothesis 2
Table 5 shows that there is a significant relationship or a significant influence between service quality and standardization. This can be seen by looking at the p-value of the model which is 0.000 that is much smaller than 0.05 (p-value < α). So, it can be inferred in hypothesis 2 that H0 is accepted, and Ha is rejected. Moreover, there is a significant influence between service quality and standardization.

Hypothesis 3
Table 5 presents that the p-value model between standardization and customer’s satisfaction shows a value of 0.000 which is also much smaller than 0.05 (α). It can be concluded in hypothesis 3 that H0 is accepted, and Ha is rejected. Furthermore, there is a significant influence or relationship between standardization and customer’s satisfaction. The bootstrapping test also produces coefficient values for each model that can be seen in the original sample values in the table and framework above. By looking at the coefficients of each variable, it can be perceived which indicators have the greatest influence on the dependent variable. Based on table 5 and the framework, it shows that the variable that has the greatest influence on standardization is management strategy with coefficient values of 0.453.

Conclusion
The research result shows a sample of the population of passengers and finds a significant effect between management strategy and standardization, a significant effect between service quality and standardization, and a significant influence or relationship between standardization and customer’s satisfaction. It can be summed up that the way
to get customer’s satisfaction importantly lies on management strategy with standardized service quality because the biggest influence on standardization is the management strategy that has been applied.

References


customization: Impact on service quality, Customer satisfaction, and loyalty. 


