The Effect of Increased Facilities and Services on Customer Satisfaction at SAMS Sepinggan BPN Airport During the Covid 19 Pandemic

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Abstract:
Background: *This study is to determine whether there is an influence between the Facility and service variables on the Customer Satisfaction variable at the SAMS Sepinggan BPN airport.*
Materials and Methods: *In this research, the method used are qualitative approach and quantitative approach method before this, data was collected using a questionnaire that was distributed to passengers. Determination of the number of samples using the Slovin formula, where in this research the population is 1,963,047 passengers. This number is based on the calculation of the total number of passengers at Sultan Aji Muhammad Sulaiman Sepinggan Airport in Balikpapan during the period from January to September 2020.After the calculation is done, the total sample required is 400 respondents. Data that has been collected, processed and analyzed using SPSS version 20.0.*
Results: *After going through the analysis, it was found that the variable facilities, and services had a significant effect on customer satisfaction at Sepinggan BPN airport, and it can be obtained that the Covid-19 pandemic has a very negative effect on aviation services.*
Conclusion: *Based on the results of the analysis of external (macro and micro) and internal factors by analyzing 5 M, as well as the results of data processing collected by distributing questionnaires to customers to determine the effect of the provision of improved facilities and services on customer satisfaction at SAMS Sepinggan Airport during the Pandemic. Covid-19 found that the facilities and services variable had a significant effect on customer satisfaction, especially the service variables which had the most influence.*
Key Word: Facilities, Services, Customer Satisfaction

I. Introduction

According to Law No. 1 of 2009 concerning Aviation, where an airport in a land area and even waters with a certain boundary can be used as a place for aircraft to land and take off, boarding and disembarking passengers, loading and unloading goods, and a place for intra and intermodal transportation of transport, and equipped with aviation safety and security facilities, even basic facilities and other supporting facilities. Airport facilities in this flight activity, both landside, and airside facilities, require a precise and directed arrangement when serving aircraft, passengers and goods so that services are safe, safe, smooth and comfortable.

In 2020, the increase in cases of corona virus disease (covid-19) in Indonesia led to a decline in economic activity in terms of air transportation, due to decreased flight activity, and the number of passengers. One of those affected is on Sultan Aji Muhammad Sulaiman Sepinggan Airport Balikpapan. Based on the Decree of the President of the Republic of Indonesia Number 12 of 2020 concerning the Determination of Non-Natural Disasters for the Spread of Covid-19, it has been determined that non-natural disasters caused by Covid-19 are national disasters. The existence of a status in this regulation has resulted in the emergence of new regulations related to the implementation of airport services to accelerate the handling of these cases. Seeing the conditions in which airport managers must implement government policies to control these cases, and on the one hand, they must maintain the level of service to service users as the best airports in Asia-Pacific, airport managers need to take steps and solutions so that both can continue to run optimally. Based on that, researchers tried to examine the effect of facility and service improvements to consumer satisfaction at SAMS Sepinggan BPN Airport during the Covid-19 pandemic.

II. Material And Methods

This study used are qualitative (Macro and Micro Evironment Analysis) and quantitative (Collection Questioner Data) approach methods.

A. Qualitative data analysis

Macro Environment Analysis

The macro-environment consists of factors that are difficult to control because they are beyond the control of company management. To facilitate analysis, often the macro environment component is abbreviated as PEST. According to Ward and Peppard (2002) PEST analysis is an analysis of external business environmental factors which include politics, economics, social & cultural, and technology used to assess the market of a business unit or organization.

The following is an analysis of the Macro Environment from SAMS Sepinggan BPN Airport which affects customer satisfaction which ends in a purchase decision:

a) Politics

In observing a direction from the President of the Republic of Indonesia regarding a ban on going home, in Large-Scale Social Restrictions, and in the context of preventing the spread of Corona Virus Disease 2019 (Covid-19), where the Task Force for the Acceleration of Handling Covid-19 stipulates the Criteria for Limiting People Travel in the Context of Accelerating Handling of Corona Virus Disease 2019 (Covid-19) and is valid until the Presidential Decree which ends Presidential Decree No.11 of 2020 concerning the Determination of the Public Health Emergency for Corona Virus Disease 2019 (Covid-19) where the airport in carrying out its activities refers to Health protocol and Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 41 of 2020 concerning an Amendment to the Regulation of the Minister of Transportation in Number PM 18 of 2020 concerning a place where Transportation Control in the framework of Preventing the Spread of Corona Virus Disease 2019 (Covid-19) includes:

➤ In adjusting the capacity (slot time) of airports based on evaluation; and

➤ In limiting the number of passengers from the total seating capacity by implementing physical distancing.

b) Economics

The Covid-19 pandemic caused a shock that led to a global recession. And in various policies that have been carried out to suppress the spread of Covid-19, such as the closure of a school, business activities, a large-scale social restriction, even a lockdown which resulted in a decrease in the level of consumption and investment.

c) Social and Cultural

In terms of the social and cultural environment, there are lifestyle change factors where the Covid-19 pandemic provides an understanding of the awareness of each individual, both who isolates themselves during this pandemic, is useful for the benefit of themselves and many people. Everyone is "forced" to make changes such as healthy and hygienic living habits, consumer behavior and how to work and learn since the government appeal to stay at home, maintain distance, and comply with the Covid-19 health protocol.

d) Technology

The Covid-19 pandemic forces everyone, companies, and agencies to carry out activities at home. Like working and studying at home, adapting and understanding how to work with systems online is a current phenomenon. From the aspect of consumer behavior to shop online, meetings are held online with online/virtual meeting applications and send work reports online so that decreased activity can occur in various modes of transportation including air transportation.

Micro Environmental Analysis

The microenvironment is the existing environment of individuals or organizations close to the company and has a direct impact on the customer/consumer experience. Porter's 5 Forces model is a model consisting of 5 parts of supporting factors of a business which aims to describe the framework as an analysis of the development of a business, including (bargaining power of buyers, bargaining power of suppliers, threat of new entrants, threat of product or service subtitles, rivalry among existing competitors).

a) **Bargaining power of buyers**

Not only because of the Government Regulation concerning the Acceleration of Covid-19 Handling which decreases passenger numbers, but also any competition in transportation services is increasing due to competitors such as land transportation modes that can be an option as long as passenger destinations are still within 1 (one) island providing special services or guarantees to customers during the Covid-19 period so that customers/buyers prefer to use them and make these customers have substantial bargaining power. The bargaining power of buyers during the Covid-19 pandemic was very high, this can be seen from the decreased realization of passengers using airport services in 2019 to 2020.

If you pay attention to the number of passengers at SAMS Sepinggan BPN Airport in 2020, it has also decreased due to increasing the Covid-19 pandemic. The following shows the data on the number of passengers at Balikpapan's Sultan Aji Muhammad Sulaiman Sepinggan Airport in 2020 for the period from January to September

Month	Number of Passengers in 2019			Number of Passengers in 2020			Ratio
	Dom	Int	Total	Dom	Int	Total	
January	498,245	4,654	502,899	435,103	5,176	440,279	-12%
February	392,528	2,347	394,875	402,377	3,945	406,322	3%
March	430,718	3,148	433,866	352,661	637	353,298	-19%
April	396,645	3,649	400,294	71,211	-	71,211	-82%
May	388,704	3,002	391,706	12,737	2	12,739	-97%
June	498,000	2,846	500,846	96,978	-	96,978	-81%
July	470,605	8,738	479,343	174,959	-	174,959	-64%
August	451,448	6,144	457,592	219,114	1	219,115	-52%
September	417,514	8,962	426,476	197,907	3	197,910	-54%
Total	3,944,407	43,490	3,987,897	1,963,047	9,764	1,972,811	-51%

Table 2. Comparison of the Number of Passengers in 2019 and 2020

b) Bargaining power of suppliers

The condition of suppliers is currently severely affected by the Covid-19 pandemic. This includes suppliers and partners from SAMS Sepinggan BPN Airport starting from Fuel Suppliers, Ground Handling Partners, to Regulated Agents. However, all suppliers/business partners from SAMS Sepinggan Airport, BPN are committed to remaining consistent in carrying out the existing cooperation. As with the Fuel Supplier which in this case is Pertamina, by Law no. 30 of 2007 concerning Energy, in which under any circumstances Pertamina will continue to serve energy to all corners of the country including to business partners even though, as in the Covid-19 pandemic, which has a significant impact on company performance due to the challenges of demand that has fallen sharply.

Other business partners such as airlines, catering, food and beverage, and retail were also affected due to the Covid-19 pandemic. The decline in the number of passengers due to the Covid-19 pandemic has also resulted in a decrease in the number of flight movements (aircraft). The following shows the data on the number of aircraft movements in 2015-2019 at Sultan Aji Muhammad Sulaiman Sepinggan Airport in Balikpapan. Compared to the number of aircraft movements in 2019 in the same period (January to September), there was an average decline of -43%, as shown in the following table:

Month	Aircraft Movement 2019			Aircraft Movement 2020			Ratio
	Dom	Int	Total	Dom	Int	Total	
January	4,865	95	4,960	4,688	93	4,781	-4%
February	4,191	80	4,271	4,501	77	4,578	7%
March	4,909	112	5,021	4,055	75	4,130	-18%
April	4,458	80	4,538	1,273	30	1,303	-71%
May	4,735	79	4,814	786	25	811	-83%
June	4,927	65	4,992	1,625	23	1,648	-67%
July	5,241	109	5,350	2,362	31	2,393	-55%
August	5,081	101	5,182	2,588	26	2,614	-50%
September	4,529	110	4,639	2,562	18	2,580	-44%
Total	42,936	831	43,767	24,440	398	24,838	-43%

Table 3. Comparison of Total Aircraft Movements in 2019 and 2020

c)   Threat of new enterants:

The presence of Aji Pengeran Tumenggung Airport (APT) Pranoto in Samarinda is a unique case that can erode the amount of drainage at SAMS Sepinggan Airport in Balikpapan by up to 45%. Also, during the Covid-19 Pandemic, APT Pranoto Airport continued to make innovations, including by making history, namely the only airport that provides an independent Covid-19 laboratory. With the signing of the Memorandum of Understanding (MoU) for the construction of the Covid-19 Diagnostic Lab between APT Pranoto Airport and the Hamera International Pte Ltd consortium, which is an investment financing company for two South Korean companies, namely LG International Corp and Eone Laboratories. The purpose of providing this lab to support the government is to break the Covid-19 chain and provide benefits to the people of East Kalimantan. Of course, the existence of APT Pranoto needs to be a trigger for AP I to carry out continuous service innovation optimally.

Table 7. Recapitulation of comparison of aircraft, passenger and cargo data

Year	Plane		Passenger		Cargo	
	APT Pranoto	SAMS Sepinggan	APT Pranoto	SAMS Sepinggan	APT Pranoto	SAMS Sepinggan
2019	8,559	43,767	789,148	3,987,897	164,596	28,194,316
2020	5,020	24,838	434,238	1,972,811	69,427	25,411,827
Ratio	-41%	-43%	-45%	-51%	-58%	-10%

d)   Threat of Substitute Product or Service:

Air transportation substitute products or services are sea and land transportation services. Consumers have the choice of using alternative transportation services considering the short distance traveled and the cost is cheaper than air transportation. Such as trains, buses, or cars, or other transportation by considering the costs incurred. However, with the high mobility of consumers of air transportation services, it is still the right choice for consumers to support their activities, especially with facilities and services during the Covid-19 pandemic, airport services following the Covid-19 protocol will certainly create a feeling of security and comfort. so that currently it remains the choice for consumers as a mode of transportation to travel long distances with a much shorter travel time.

e)   Competition among industry (Rivalry among existing competitors)

With the appointment of the Sams Sepinggan Balikpapan Airport as the winner of the Airport Service Quality (ASQ) award in 2017 as the second-best category of Airport with a passenger capacity of 5-15 million people per year by the Airport Council International (ACI) which was attended by 343 Airports from 84 countries in around the world, where the first position is obtained by Rajiv Gandhi International Airport in

Hyderabad, India. At the same time, Bali Ngurah Rai Airport and Juanda Airport are the best in the first and third place with the category of passenger capacity of 15-25 million people per year.

B.   Quantitative data analysis
Method of collecting data

This study uses a quantitative approach which according to Milyadi (2011: 69) quantitative research is a study with the aim of finding out whether there is an influence between the dependent variable which is usually symbolized by "X" on the independent variable which is usually symbolized by "Y". Prior to this, data was collected using a questionnaire that was distributed to passengers. Determination of the number of samples using the Slovin formula, where in this research the population is 1,963,047 passengers. This number is based on the calculation of the total number of passengers at Sultan Aji Muhammad Sulaiman Sepinggan Airport in Balikpapan during the period from January to September 2020.

So that when entered into the formula with the data the results are as follows:

$$n = \frac{1.963.047}{1 + 1.963.047(0,05)^2}$$
$$n = 400$$

Information :

n = number of samples that will be used as research respondents

N = total passengers of PT. Angkasa Pura I (Persero) Balikpapan SAMS Airport Branch (January to September 2020 period)

e = Tolerance of the degree of leeway (error rate) inaccuracy due to sampling error, where in social research the maximum error rate is 5% (0.05)

After doing the following calculations, the total sample required is 400 respondents. Data that has been collected, processed and analyzed using SPSS version 20.0

| Variable	Dimension	Indicator
Facilities (X1)	Facilities in the process of departure and arrival of passengers, facilities that provide comfort to passengers, additional service facilities	Availability, cleanliness, completeness
Services (X2)	Realibility, Responsiveness, Assurance, Emphaty, Tangibles	Handling, safety, procedures
Customer Satisfaction (Y)	Satisfaction, Customer Expectations Fulfilled, Always Buying Products, Will Recommend to others	Satisfaction, expectations, repeat purchases, recommendations

Table 10. Variable, Dimension and Indicator
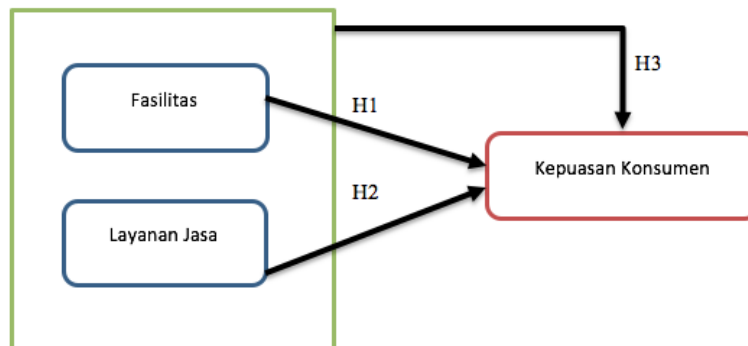
Figure 1. Framework Model

Hypothesis:
H1: Facilities have an effect on customer satisfaction
H2: Services have an effect on customer satisfaction
H3: Facilities and services simultaneously affect customer satisfaction

III.   Result

Each question posed to the recipient has validity and reliability. The output generated from each variable of this study is valid, where each value is not above the r table (r = 0.250). Based on this, it can be seen as a description of the characteristics of the research respondents which can be seen in the following table:

Deskripsi	Spesifikasi	Jumlah
Gender	Laki-laki	230
	Perempuan	170
Usia	< 20 Tahun	4
	20-29 Tahun	190
	30-39 Tahun	130
	40-49 Tahun	61
	50-59 Tahun	13
	> 60 Tahun	2
Pendidikan	SD Sederajat	1
	SMP Sederajat	4
	SMA Sederajat	183
	D3	37
	S1	158
	S2-S3	17
Pekerjaan	Pelajar/Mahasiswa	32
	Wiraswasta	103
	PNS.\/TNI/POLRI	49
	Lain-lain	216

Table 11. Description of the Research Object

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,908	1,469		4,417	.000
	Amenities	.137	.031	.229	4,456	.000
	Service	.218	.024	.466	9,052	.000

a. Dependent Variable: Customer Satisfaction

Table 10. The Effect of Provision of Improved Facilities and Services on Customer Satisfaction at SAMS Sepinggan Airport BPN during the Covid-19 Pandemic

The results can be illustrated by the model → Y = 4.908 + 0.137X1 + 0.218X2
Based on table 3 and the results of the calculation of multiple linear regression, general indications are that services have a positive (0.218) and significant (0.000) effect on customer satisfaction at SAMS Sepinggan BPN Airport during the Covid-19 Pandemic. Likewise, the Facility variable has a positive (0.137) and significant (0.000) effect. Ghozali (2013) argues that a significant value (<0.05) means that there is a significant influence between the independent variable and the dependent variable. An explanation of each dimensional variable that contributes to influencing Customer Satisfaction at SAMS Sepinggan BPN Airport during the Covid-19 Pandemic can be seen in Table 4 below:

		Perasaan Puas	Terpenuhi Harapan Konsumen	Selalu membeli Produk	Akan merekomendasikan kepada orang lain
Fasilitas para Proses Keberangkatan dan Kedatangan	Pearson Correlation	.329**	.343**	.384**	.386**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Fasilitas yang memberikan Kenyamanan terhadap	Pearson Correlation	.475**	.475**	.506**	.441**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Fasilitas Layanan Tambahan	Pearson Correlation	.330**	.306**	.440**	.342**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Realibilty	Pearson Correlation	.524**	.429**	.368**	.299**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Responsiveness	Pearson Correlation	**.623****	**.548****	**.378****	**.349****
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Assurance	Pearson Correlation	.574**	.451**	.370**	.395**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Emphaty	Pearson Correlation	.590**	.500**	.325**	.405**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400
Tangibles	Pearson Correlation	.501**	.439**	.298**	.405**
	Sig. (2-tailed)	0	0	0	0
	N	400	400	400	400

Table 12. Variable Correlation Analysis

In table 4 it can be seen that facilities and services have a positive effect on customer satisfaction at SAMS Sepinggan BPN Airport during the Covid-19 Pandemic, with values: reliability, responsiveness, assurance, empathy, tangibles which are dimensions of service services, generally have an impact the largest and most significant; direct financial payments, indirect financial payments, non-financial rewards which are dimensions of compensation have a significant impact on turnover intention; Likewise with value: facilities in the process of passenger departure and arrival as well as additional facilities which are dimensions of facilities, have a positive and significant impact.

IV.   Discussion
This study examines the assessment of the relationship of the two variables, namely facilities and services which influences the satisfaction of consumer at SAMS Sepinggan Balikpapan Airport. Both of these variables are important to study with consumer satisfaction at the airport. Consumers will feel satisfied, safe, and comfortable using the services of SAMS Sepinggan Balikpapan Airport as the main choice for long-distance transportation during the Covid-19 pandemic. The feeling of satisfaction, safety, and comfort that you feel is due to efforts to improve services and facilities according to the procedures for preventing the pandemic of Covid-19 implemented by SAMS Sepinggan Balikpapan Airport which is also following the Indonesian Government Regulations. This is following the results obtained from this study that the second variable has a positive relationship with customer satisfaction. In line with the previous research which states that the service quality has a positive effect on consumers satisfaction, Sandriana, Dika, Imam (2018). According to research by Nofitasari, Alwi, Rahayu (2016), it is stated that facilities and service quality have a positive and significant effect on customer

V. Conclusion

Based on the results of the analysis of external (macro and micro) and internal factors by analyzing 5 M, as well as the results of data processing collected by distributing questionnaires to customers to determine the effect of the provision of improved facilities and services on customer satisfaction at SAMS Sepinggan Airport during the Pandemic. Covid-19 found that the facilities and services variable had a significant effect on customer satisfaction, especially the service variables which had the most influence. It is undeniable that the Covid-19 pandemic has a very negative impact on all business sectors including aviation services. This can be seen from the number of passenger realization which began to drop drastically in 2019 by -28% and aircraft movements that fell to -16% from the previous year both domestic and international flights due to the operation of APT Pranoto Samarinda Airport. Especially in 2020, the period from January to September during the Covid-19 pandemic, when compared to the previous year (2019) there was a decrease in the number of passengers on average by -51% and on average decrease in aircraft movements by -60%, with the largest drop in April when the implementation of the flight restriction policy in anticipation of the prevention of Covid-19 in Indonesia. Entering the New Normal phase by implementing the Covid-19 protocol in every facility and service of SAMS Sepinggan Airport, BPN will generate consumer trust and satisfaction so that consumers feel confident and comfortable traveling on air and making air travel the main transportation option for long trips. Seen from a significant increase in the number of passengers and aircraft movements starting from June to September 2020.

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