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**THE EVALUATION OF SAM RATULANGI INTERNATIONAL AIRPORT ATTRIBUTES  
BY USING IMPORTANCE AND PERFORMANCE ANALYSIS***EVALUASI ATRIBUT BANDARA INTERNASIONAL SAM RATULANGI DENGAN MENGGUNAKAN  
ANALISIS KEPENTINGAN DAN KINERJA*

By  
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**Abstract:** Nowadays transportation is a very important tool in human life. The needs to move and to distribute goods makes transportation much needed. Moving and distribution of the goods is very important because this is what makes the economy run. The objectives of this research are to know about the importance and performance of Sam Ratulangi International Airport Attributes. This research is descriptive study with a quantitative approach. Descriptive in this study means that the researcher tries to describe and explain the airport attributes of Sam Ratulangi International Airport by using Importance and Performance Analysis. 100 Respondents are the sample size of this research. The result of this research shows that Resting Facilities are located in quadrant I which is very importance for consumer but the performance perceived to be low. Parking Facilities and Airport Image are located in quadrant II because it is importance for consumer meanwhile the performance also is good. These attributes are the biggest factor that influence The Airport. Whereas for Luggage Handling and Commercial Facilities are in quadrant III means that the two attributes are not really importance for the consumer and at the same time also has the low performance level. Sam Ratulangi International Airport better to pay more attention and improve the attributes that have low performance and maintain the attributes that has high performance to get better.

**Keywords:** importance and performance analysis, airport attributes

**Abstrak:** Saat ini transportasi adalah alat yang sangat penting dalam kehidupan manusia. Kebutuhan untuk berpindah dan mendistribusikan barang membuat transportasi sangat dibutuhkan. Perpindahan dan distribusi barang sangat penting karena inilah yang membuat ekonomi berjalan. Tujuan dari penelitian ini adalah untuk mengetahui tentang kepentingan dan kinerja Atribut Bandara Internasional Sam Ratulangi. Penelitian ini merupakan penelitian deskriptif dengan pendekatan kuantitatif. Deskriptif dalam penelitian ini berarti bahwa peneliti mencoba untuk menggambarkan dan menjelaskan atribut Bandara Internasional Sam Ratulangi dengan menggunakan analisis kepentingan dan kinerja. 100 Responden adalah ukuran sampel penelitian ini. Hasil dari penelitian ini menunjukkan bahwa Resting Facilities terletak di kuadran I yang sangat penting bagi konsumen tetapi kinerjanya dianggap rendah. Parking Facilities dan Airport Image terletak di kuadran II karena sangat penting bagi konsumen sementara kinerjanya juga baik. Atribut-atribut ini adalah faktor terbesar yang mempengaruhi bandara. Sedangkan untuk Luggage Handling dan Commercial Facilities berada di kuadran III berarti kedua atribut tersebut tidak terlalu penting bagi konsumen dan pada saat yang sama juga memiliki tingkat kinerja yang rendah. Sebaiknya Bandara Internasional Sam Ratulangi lebih memperhatikan dan meningkatkan atribut-atribut yang memiliki kinerja rendah dan mempertahankan atribut-atribut yang memiliki kinerja tinggi untuk menjadi lebih baik.

**Kata kunci:** analisis kepentingan dan kinerja, atribut bandara

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## INTRODUCTION

### Research Background

Nowadays transportation is a very important tool in human life. The needs to move and to distribute goods makes transportation much needed. Moving and distribution of the goods is very important because this is what makes the economy run. Without transportation, needs of supply will be obstructed which can result in various problems. If there is no transportation, people cannot be moved to another place so that people could not work to meet their needs. Transportation always needs to evolve over time. Realizing the importance of transportation, the government gives special attention to the transportation system in the country. Transportation quality can be seen from the ability of range, cruising, comfort, price level, time efficiency, safety and security standard. On the other hand, to support the movement and distribution of goods, it can be supported by transportation such as air transport.

Many people prefer to travel by air transport rather than land or sea transportation. One of the reasons, with air transportation is more speed up the time when customers access one place to another. Other factors that play a role, namely the increasing capacity of the economy and increasingly strong purchasing power, the price of airline tickets is no longer as expensive as before and can be reached by the public. In recent years, air freight service is selling well in Indonesia. Many airlines offer cheap flights to attract people. In line with the high demand for aviation services, eventually emerging many new airlines amid the existence of existing airlines. Foreign airlines also entered the airline industry in Indonesia. One reason is the national aviation market potential is huge. The growing use of air transport annually cause higher passenger activity at the airport.

The airport is a facility where aircraft and helicopters can take off and landing. Airport is one of the most directly connected infrastructure with service users. All regions or provinces in Indonesia already has an airport. The airport has been regarded as the gateway of the region and even the country and also a symbol of its own prestige for domestic and international aircraft passengers. Currently, the airport is becoming a reflection of tourism services, airport terminals are no longer the only passenger gates but also as a means of recreation, entertainment, tourism and information center. Similarly, Sam Ratulangi Airport as an international airport has a strategy and stimulation of economic development of the region and has become a prestige for the people of North Sulawesi.

Sam Ratulangi Airport is an airport in the city of Manado with an area of 233 hectares. Sam Ratulangi, whose full name is Dr. Gerungan Saul Samuel Jozias Ratulangi, a Minahasan hero who works as a politician, a journalist and a teacher. His name was then immortalized at airports, roads and universities in Manado. As the Government's efforts to develop the airport in 1990, Sam Ratulangi airport managed by PT. Angkasa Pura I (Persero) as the State-owned enterprises.

Attributes have a significant impact to influence consumer decision making. The choice attribute has a differential feature compared to the interests. Consumer choice behavior is the result of human intrinsic decision-making process. There are various factors that influence the selection of airports, as follows. Marcucci and Gatta (2011) introduced five variables that influence the selection of airports; they include: the type of airline; flight connectivity; waiting time; parking lot; number of flights.

Based on the problem background above, this study is entitled: The Evaluation of Sam Ratulangi International Airport Attributes by using Importance and Performance Analysis.

### Research Objectives

To know about the importance and performance of Sam Ratulangi International Attributes.

## THEORETICAL REVIEW

### Marketing

Marketing is the science and art of exploring, creating, and delivering value to satisfy the needs of a target market at a profit. Marketing identifies unfulfilled needs and desires. It defines, measures and quantifies the size of the identified market and the profit potential. It pinpoints which segments the company is capable of serving best and it designs and promotes the appropriate products and services. Moreover, Kotler and Keller (2013) defines Marketing is the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society in large.

Marketing, more than any other business function, deals with customers. Marketing is managing profitable customer relationships. The two-fold goal of marketing is to attract new customers by promising superior value and keep and grow current customers by delivering satisfaction, Kotler and Armstrong (2006).

### **Airport Selection Attributes**

Selection attributes refer to the physical, observable characteristics of a product and has a relatively specific meaning. The attributes have a significant impact on product selection and thus affect the decision-making of consumers. Selection attributes have differential features compared to importance. Consumer choice behaviors are the result of intrinsic decision-making process of humans. It involves the following. First, customer evaluation on their decision-making alternatives consists of factors that include the environment and space that limit the evaluation. Second, the attributes of alternatives are integrated towards the perceived destination. Third, the evaluated attributes are linked to spatial behaviors through the decision-making principles of individuals. When travelers select an airport, they are affected by such selection attributes. There are lots of studies on airport selection and the selection attributes. There are various factors that affect the airport selection, which are as follows, Oh and Park (2014).

### **Facilities**

Transport sector must be supported by the development, maintenance and provision of facilities services air transportation including Airports. The provision of such facilities is expected to deliver comfort, convenience and security for visitors. Airport infrastructures are the first contact point for passengers when they arrive at their destination.

### **Resting Facilities**

Resting place or airport lounge is the place that direct and gather flight service users while wait the flight. The airport lounge has to be able to meet the demand of consumers so that consumers feel welcome and comfortable during waiting for the flight.

### **Parking Facilities**

Parking is one of the very important support facilities of its existence, especially in airport.

### **Commercial Facilities**

Commercial facilities really affect customers perception and satisfaction, also the quality of airport operation. Several examples for commercial facilities is toilet, ATM, store, café, shopping and restaurant services.

### **Luggage Handling**

In general, luggage handling or baggage handling procedures in the world of flight are arranged in such a way as to create the same standardization between one airline and another airline.

### **Airport Image**

Corporate image can be defined as perceptions of an organization reflected in the associations held in consumer memory, Babin, Lai, and Griffen (2009).

### **Previous Research**

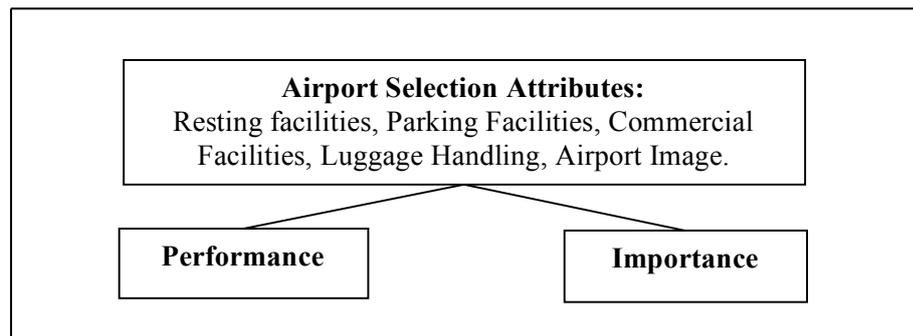
Oh and Park (2014) A Study on Importance and Satisfaction of Airport Selection Attributes: Focus on Gimpo International Airport and Incheon International Airport, this study is aimed at identifying the importance and satisfaction of airport selection attributes by targeting Incheon International Airport and Gimpo International Airport in the metropolitan area of Korea.

Al-Refaie. et al. (2014) Examining Factors that Affect Passenger's Overall Satisfaction and Loyalty: Evidence from Jordan Airport, this paper aims at investigating the effects of service quality, satisfaction with the service recovery, value, image, and price on passenger's overall satisfaction and loyalty.

George (2013) Modified Importance – Performance Analysis of Airport Facilities- A Case Study of Cochin International Airport Limited, this study aims to measure passengers' perception of the importance of the four factors of check-in facility, amenities, terminal facilities, and airport accessibility facility with regard to their visit to the airport and their perceived level of performance of the particular facility and the resulting gap.

## Conceptual Framework

In this section, will be explained about the framework of this research, what variables are used and how it correlates to form a conceptual framework.



**Figure 1. Conceptual Framework**

*Source: Data Analysis Method, (2018)*

Based on figure, this research is conducted to analyze importance and performance of Sam Ratulangi Airport Attributes.

## RESEARCH METHOD

### Type of Research

This research is descriptive study with a quantitative approach. Descriptive in this study means that the researcher tries to describe and explain the airport attributes of Sam Ratulangi International Airport by using Importance and Performance Analysis (IPA).

### Place and Time of Research

The place of this research will be conducted in Sam Ratulangi International Airport, Manado. The research started from January to March 2018.

### Population and Sample

Sudman and Blair (1998:338) the population is the entire set of elements being studied and should be defined in terms of time, place element and sample unit. The population in this research is all customers of Sam Ratulangi International Airport Manado. The sample in this research is 100 respondents of customers Sam Ratulangi International Airport Manado.

### Operational Definition

This study use airport attributes as the variables for this research, airport attributes are characteristic of airport itself. Airport attributes means the characteristics of Sam Ratulangi airport fulfil the customer satisfaction. In this research have several indicators the researcher used, namely resting facilities, parking facilities, commercial facilities, luggage handling, and airport image.

### Data Analysis Method

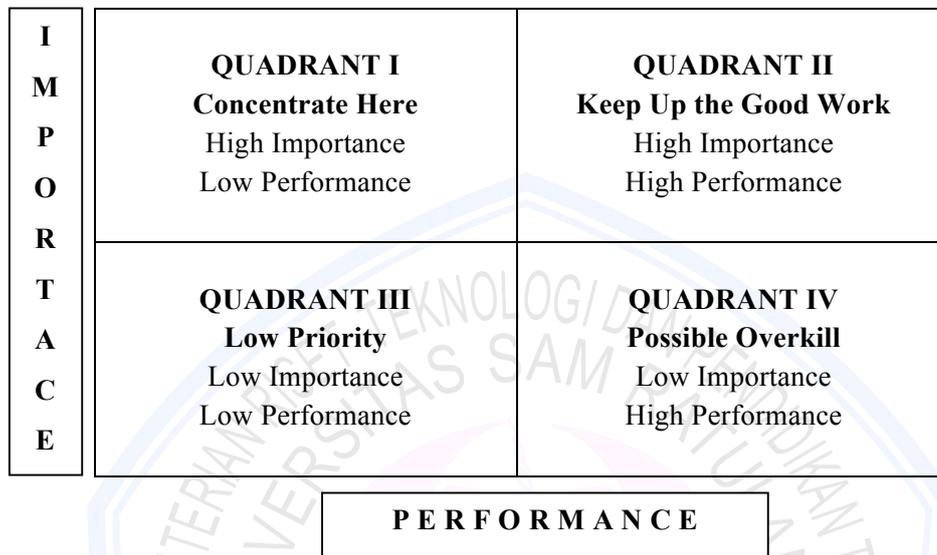
#### Validity and Reliability Test

Validity test is aimed to test whether the question items or indicators are able to measure what is supposed to be measured. The reliability of a measure indicates the extent to which it is without bias and ensures consistent measurement across time and various items.

### Importance and Performance Analysis

Developing this idea, Martilla and James (1977) devised Importance-Performance Analysis (IPA) as a simple graphical tool to further the development of effective marketing strategies based on judgment of the importance and performance of each attribute. The Importance and Performance Analysis technique is that customers' level of satisfaction with the attributes is mainly derived from their expectations and judgment of the

product's or service's performance. The use of Cartesians diagram is necessary to describe the elements of suitability level of importance and satisfaction, applied through a chart which is divided into four quadrants and bounded by two perpendicular lines that intersect at points (x,y). If the weight level of the implementation (performance) is greater or equal to weights of importance (expectations), means the performance of the Airport has met expectations of customer. Meanwhile, if the weight of implementation (performance) is smaller than the weight of importance (expectations), means the performance was below expectations. It shows that employee satisfaction is not achieved. The weight of the company's importance and performance appraisal are formulated into a diagram Importance-Performance.



**Figure 2. Importance Performance Analysis Grid**

Source: Martilla and James (1977)

**RESULT AND DISCUSSION**

**Validity and Reliability Result**

**Validity Test**

**Table 1. Validity Test Result**

<b>Correlations</b>		Average_ Importan ce	Average_ Performa nce	Average_Important_ and Performance
Average_Importance	Pearson Correlation	1	,500**	,849**
	Sig. (2-tailed)		,000	,000
	N	100	100	100
Average_Performance	Pearson Correlation	,500**	1	,882**
	Sig. (2-tailed)	,000		,000
	N	100	100	100
Average_Important_and_Performance	Pearson Correlation	,849**	,882**	1
	Sig. (2-tailed)	,000	,000	
	N	100	100	100

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Output (2018)

Table 1 shows that the correlation index is higher than 0.3 and below the significance level of 5%. Therefore, the data is considered valid.

## Reability Test

**Table 2. Reability Test Result**

Cronbach's	
Alpha	N of Items
,888	3

*Source: SPSS Output (2018)*

Table 2 Shows that Alpha Cronbanch is 0.888 which is above the acceptance limit of 0.6; therefore, the research instrument is reliable.

## Importance and Performance Analysis of Food Quality

**Table 3. Attributes, Importance Mean, Performance Mean, Quadrant**

Sam Ratulangi International Airport Attributes	Importance Mean	Performance Mean	Quadrant
Resting Facilities	4.14	3.47	I
Parking Facilities	4.13	3.72	II
Commercial Facilities	4.11	3.6	III
Luggage Handling	4.08	3.46	III
Airport Image	4.13	3.96	II
<b>AVERAGE</b>	<b>4.12</b>	<b>3.64</b>	

*Source: Data Processed (2018)*

## Discussion

This research has identified five attributes, namely: Resting Facilities, Parking Facilities, Commercial Facilities, Luggage Handling, and Airport Image. An important attribute is one that offers an important benefit towards the satisfaction of consumer needs (Aaker, Batra and Myers, 1992). Researcher has considered all variables/factors which are theories, books, journal and some other supporting sources in constructing whole research. Questionnaire is used to collect data and Likert scale is used to score data. The data then tabulated and analyzed with Importance and Performance Analysis Method. This method is useful to see the importance and performance of airport attributes in Sam Ratulangi International Airport. IPA matrix divided into 4 quadrants, concentration here as quadrant I, Keep up the good work as quadrant II, Low priority as quadrant III, and Possible overkill as quadrant IV. The result of this research shows the importance of the attributes to the customers and how well the performance of the Airport Attributes in Sam Ratulangi International Airport is according to the customers' satisfaction as seen on the quadrant.

Resting Facilities is located in quadrant I (Concentrate Here). This means that these attributes are perceived to be importance to customer and the performance level are fairly low. Resting Facilities is very important because customer can do activities in resting facilities, so the passengers do not feel bored because it's often occur delay hours or passengers waiting for departures. But the performance of resting facilities in Sam Ratulangi International Airport fairly low this means that all the expatiation of consumer is not fulfill with what they used.

Parking Facilities and Airport Image are located in quadrant II (Keep up the good work). Attributes that are located in Quadrant II means that the two attributes are perceived to be very importance to consumer and at the same time has the highest performace level. It is a sign that these attributes have affected most of customer. In short, the customers are already satisfied with Airport Attributes of Sam Ratulangi International Airport performance and the Airport needs to maintain and keep this customer's satisfaction. These results show that the airport delivers the performance as well as the customers' satisfaction.

Commercial Facilities and Luggage Handling are located in quadrant III (Low Priority), Attributes that are located in Quadrant III means that these two attributes have a low level of importance and at the same time

also have a low level of performance. These results of the attributes located in this quadrant are not a priority to Sam Ratulangi International Airport.

There are no attributes in quadrant IV (Possible Overkill). Attributes that are located in this quadrant mean that the attribute has low importance to the customers but the performance of Sam Ratulangi International in that attribute is high.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

This research has identified 5 attributes of Sam Ratulangi International Airport attributes, namely: Resting Facilities, Parking Facilities, Commercial Facilities, Luggage Handling and Airport Image. The Importance Performance Analysis is used to compare them according to customer perceptiveness toward their level of importance and performance. The conclusions drawn from this research are as follows:

1. In quadrant I (concentrate here) there are Resting Facilities. Resting Facilities is very important for consumer, but the performance of Resting Facilities is perceived to be low. Resting Facilities is very important because customer can do activities in resting facilities, so the passengers do not feel bored because it's often occur delay hours or passengers waiting for departures. But the performance of resting facilities in Sam Ratulangi International Airport fairly low this means that all the expatriation of consumer is not fulfill with what they used.
2. In quadrant II (Keep Up the Good Work) there are Parking Facilities and Airport Image. The performance of Sam Ratulangi International Airport is perceived as good as what consumer of Sam Ratulangi International Airport expected and these attributes are perceived to be very important to consumer.
3. In quadrant III (Low Priority) there are Luggage Handling and Commercial Facilities, which are assessed to low priority airport attributes when the importance and performance level are perceived low for consumer of Sam Ratulangi International Airport.
4. In quadrant IV (Possible Overkill) there is no attributes located in this quadrant, Attributes that are located in this quadrant have low importance to the customers, but the performance of Sam Ratulangi International Airport regarding the attributes is high.

### Recommendations

By looking in the discussion and the result of the research, some recommendations have been made as listed below:

1. Resting Facilities is very important for consumer but the performance perceived to be low. In addition, it needs to be increase in terms of the performance of this airport because its score importance is higher than the score for performance. Therefore, the airport need to pay attention and take action in make Resting Facilities comfortable and feasible as consumer expected. In order to increase the level of performance in this attribute and make customer will feel satisfied.
2. Parking Facilities and Airport Image are located in quadrant II because it is importance for consumer meanwhile the performance also is good. These attributes are the biggest factor that influence to Sam Ratulangi International Airport. Consumers feel satisfied with Parking Facilities and Airport Image, so Sam Ratulangi International Airport should maintain their Parking Facilities and Image of the airport and keep doing the best in order to keep the consumer expatriation.
3. Luggage Handling and Commercial Facilities are in quadrant III meaning low priority. The airport does not need to be concern about the performance of these attributes since it is not perceived to be very important to the consumers. Therefore, Sam Ratulangi International Airport should improve the security of baggage and the cleanliness of Commercial Facilities at the airport, so the consumer will fell satisfied.

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