

# Determinant Analysis Considered Consumers of Waropen Regency in Using Marine Express Sea Transportation Fleet Offered by PT. Papua Mandiri Bubble Biak Branch

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## Abstract

*Management of PT. Belibis Papua Mandiri Biak Branch is required to be able to understand consumer attitudes and behavior, especially the consideration factors related to consumer preferences for sea transportation services in consumers' subjective thoughts. In order to determine the relationship between these considerations and preferences, an empirical study is needed as the basis for the formulation of a new policy that is contributive to efforts to expand the company's market share in the future in Waropen Regency. The research method is qualitative. The results of the partial correlation analysis based on the Spearman Rank Correlation Coefficient approach show that the largest partial correlation coefficient is found in the relationship between browsing speed and consumer interest ( $r_7 = 0.9847$ ) while the smallest correlation coefficient is found in the relationship between price levels and consumer interest ( $r_2 = 0.4963$ ) this indicates that Roaming Speed is the main factor that stimulates consumers to use air transportation services offered by Express Bahari motorboats, while Price Level is the main factor that tends to limit consumers in using marine transportation service products.*

## Keywords

marine express; marine transportation; management



## I. Introduction

In essence, the shift of world civilization towards a global order is the impact of the rapid advances in information, communication and transportation technology; which in fact narrows the space and distance between countries. If information and communication technology open the perspective of relations between countries indirectly, then on the other hand, advances in transportation technology directly provide great access to relations between countries and regions. Transportation is one of the necessities that is quite essential in modern society, because in most modern human activities with high mobility, humans cannot be separated from their needs and needs for transportation facilities. The magnitude of the human need for transportation can be seen from the actual conditions today which show the rapid progress of transportation, information and communication technology as a sign of the increasingly globalized era of the universe. Communication is the process of delivering messages by someone to other people to tell, change attitudes, opinions or behavior either directly orally or indirectly through the media. In this communication requires a reciprocal relationship between the delivery of messages and recipients namely communicators and communicants. (Hasbullah, et al. 2018).

Transportation is the process of moving goods and people from the place of origin to the destination. Where in the process there are three elements that characterize transportation; namely: there is a load to be transported, a vehicle is available as a means of transportation, and the availability of a road that can be traversed by the conveyance.

(Siregar Muchtarudin; 1999: 3). The opinion above shows that in fact the problem of transportation or transportation does not only play an important role in smoothing the flow of goods and human mobility; but also helps achieve the optimal allocation of economic resources. Thus, transportation services must be adequately available and affordable by the people's purchasing power. Based on the nature of the operation, Transportation can be divided into five types, namely: Railroad (Railroad or Railway), Motorcycle and Highway Transportation (Motor-Road/Highway Transportation), Sea and Water Transportation (Sea and Water Transportation), Air Transportation (Air Transportation) and Pipeline Transport. Of the five types of transportation, sea and water transportation has several unique features as follows:

- a. Sea and Water Transportation (Waterway) is a vital natural resource and is available free of charge, so that transportation by water is often a relatively cheaper transportation, especially for the transportation of bulk goods or packaged raw materials.
- b. Shipping by water can help local industry gain an advantage in entering the market in certain areas, especially in countries that are made up of islands and where there are many rivers and lakes.
- c. Can limit the determination of high land transportation rates (not feasible), especially in areas where there may be competition between land transportation and water transportation.

In addition to the uniqueness above, the geographical condition of the Papua province is very wide and difficult to explore using land transportation, causing the Papuan people's need for sea and water transportation services to increase, including the people who live in the Yapen Islands and Waropen districts. One form of sea and water transportation that plays a significant role in the context of community mobilization in Waropen district is the Motor Express Bahari Ship which is managed by PT. Belibis Papua Mandiri Biak Branch.

The objective condition shows that the mobilization of the population of Waropen district using two Express Bahari ships is relatively high and has a tendency to increase in line with the rate of population growth and the increase in socio-economic activities of the community from period to period. Through preliminary research, it is known that in addition to the Express Bahari ship, there are also several similar companies that offer sea transportation service products for the Waropen community, both with shipping routes to Serui as well as to Biak and Nabire. Based on the results of preliminary research, it is also known that comparatively the cost of transportation with Express Bahari ships is much higher than other shipping fleets. Although this ship has advantages in terms of speed, its high-cost rate is one of the factors that determine the competitiveness of this transportation fleet. Facing the increasingly competitive marine transportation business today, the management of PT. Belibis Papua Mandiri Biak Branch is required to be able to understand consumer attitudes and behavior, especially the consideration factors related to consumer preferences for sea transportation services in the subjective thinking of consumers.

In order to find out the relationship between these considerations and preferences, an empirical study is needed as the basis for formulating a new policy that is contributive to efforts to expand the company's market share in the future. Starting from the concept of thought above, the authors are interested in conducting scientific research aimed at knowing a number of determinants that affect consumer preferences for Express Bahari Sea transportation services offered by PT. Belibis Papua Mandiri Biak Branch. This interest the author realizes through the writing of a scientific research proposal entitled: Analysis of Determinants Considered by Waropen Regency Consumers in Using the

Marine Express Maritime Transportation Fleet offered by PT. Belibis Papua Mandiri Biak Branch.

## II. Research Method

### 2.1 Operational Definition

Limitations on several terms that underlie the title of this research can be described in operational definitions as follows:

- a. Analysis; interpreted as an investigation of an event to find out the actual situation; by way of outlining a subject of study into certain parts that are studied separately, in order to obtain a complete understanding of the event.
- b. Determinants; interpreted as factors that affect an object of observation or object of study. In this study, the term Determinant is intended as factors that are taken into consideration for consumers in choosing air transportation services.
- c. Consumer; defined as a community of users or users of certain products or services, to satisfy their needs and desires.

### 2.2 Research Site

This research will be carried out on the potential market segment of Express Bahari ship users in Waropen district, which in this study is limited to potential consumers who live in Waropen Bawah district and Urei Faisei district, Waropen district.

### 2.3 Population and Sample

The population that is the object of this research is all potential consumers who have used sea transportation services on Express Bahari ships managed by PT. Belibis Papua Mandiri Biak Branch, with an unlimited population. In order to facilitate the analysis process, so this study only uses 200 respondents as a sample. The sample selection was carried out using the Randomize Sampling technique, where each member of the population has the same probability of being selected as the research sample.

## III. Result and Discussion

The measurement results above show the order of importance from the most important attributes to the relatively less important attributes, respectively: Sailing Convenience (A2 Attribute), Roaming Speed (A8), Price Level (A7), and Brand Reputation (A1 Attribute). Spearman Rank correlation analysis

This analysis is used to measure the partial effect of each determinant on consumer interest in using the fleet Express Bahari motorboat as a marine transportation service. The determinants used in this analysis are limited to only four attributes that are not eliminated in the series of Q-Cochran test stages. Spearman Rank Correlation Analysis (  $r_s$  ) was carried out using the formula:

$$r_s = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Where: d = Difference between pairs of data sequences

Giving a quality perception score for each attribute of consideration and consumer interest in using the Express Bahari fleet as a sea transportation service of interest is based on a Schemantic Differential scale as follows:

1. Airline Reputation (attribute A1)  
Not very prestigious 1 – 2 – 3 – 4 – 5 – 6 – 7      VeryPrestigious
2. Sailing Convenience (attribute A2)  
Very comfortable 7 – 6 – 5 – 4 – 3 – 2 – 1      Very notComfortable
7. Price Level (attribute A7)  
Very cheap 7 – 6 – 5 – 4 – 3 – 2 – 1      Very expensive
8. Roaming Speed (A8 attribute)  
Very slow 1 – 2 – 3 – 4 – 5 – 6 – 7      VeryFast
9. Interest in Using Maritime Express Transportation Services  
Very interest 7 – 6 – 5 – 4 – 3 – 2 – 1      Very Uninterested

Variations in respondents' answers related to perceptions of the quality of the four remaining determinants of the Q-Cochran test, as well as respondents' interest in determining the Express Bahari airline as a sea transportation service of interest, are presented in appendix – 2. Because the variation in the score of respondents' answers in appendix-2 is data ordinal, then before measuring the value of the Spearman rank correlation coefficient, the respondent's answer score must first be converted into a data pair sequence score, as presented in Tables 4.4 – 4.7 which describes the relationship between each consideration attribute and consumer interest in Waropen Bawah and Urei Faisei districts. in using the service products offered by Express Bahari fast boats.

### 3.1 Relationship between Airline Reputation (A1) and Consumer Interest (M)

**Table 1.** Procedure for Measurement of Correlation Between Airline Reputation ( A1 ) and Consumer Interest in Using Maritime Express Transportation Services

No.	A1	M	( A1 – M )2	No.	A1	M	( A1 – M )2
01	9.5	5.5	16	64	101.5	122.5	441
02	101.5	122.5	441	65	50.5	53.5	9
03	50.5	53.5	9	66	50.5	53.5	9
04	50.5	53.5	9	67	101.5	53.5	2.304
05	101.5	53.5	2.304	68	122.5	108.5	196
06	122.5	108.5	196	69	50.5	53.5	9
07	50.5	53.5	9	70	9.5	53.5	1,936
08	9.5	53.5	1,936	71	50.5	53.5	9
09	50.5	53.5	9	72	9.5	5.5	16
10	9.5	5.5	16	73	50.5	53.5	9
11	50.5	53.5	9	74	101.5	108.5	49
12	101.5	108.5	49	75	50.5	53.5	9
13	50.5	53.5	9	76	101.5	53.5	2.304
14	101.5	53.5	2.304	77	50.5	53.5	9
15	50.5	53.5	9	78	50.5	53.5	9
16	50.5	53.5	9	79	101.5	108.5	49
17	101.5	108.5	49	80	50.5	53.5	9
18	50.5	53.5	9	81	50.5	53.5	9

19	50.5	53.5	9	82	9.5	53.5	1,936
20	9.5	53.5	1,936	83	50.5	5.5	2.025
21	50.5	5.5	2.025	84	101.5	53.5	2.304
22	101.5	53.5	2.304	85	50.5	108.5	3.364
23	50.5	108.5	3.364	86	50.5	53.5	9
24	50.5	53.5	9	87	122.5	53.5	4.761
25	122.5	53.5	4.761	88	9.5	5.5	16
26	9.5	5.5	16	89	50.5	53.5	9
27	50.5	53.5	9	90	50.5	53.5	9
28	50.5	53.5	9	91	101.5	108.5	49
29	101.5	108.5	49	92	50.5	53.5	9
30	50.5	53.5	9	93	9.5	53.5	1,936
31	9.5	53.5	1,936	94	101.5	108.5	49
32	101.5	108.5	49	95	50.5	53.5	9
33	50.5	53.5	9	96	50.5	53.5	9
34	50.5	53.5	9	97	101.5	53.5	2.304
35	101.5	53.5	2.304	98	101.5	108.5	49
36	101.5	108.5	49	99	50.5	53.5	9
37	50.5	53.5	9	100	50.5	53.5	9
38	50.5	53.5	9	101	50.5	53.5	9
39	50.5	53.5	9	102	101.5	53.5	2.304
40	101.5	53.5	2.304	103	101.5	108.5	49
41	101.5	108.5	49	104	50.5	53.5	9
42	50.5	53.5	9	105	101.5	53.5	2.304
43	101.5	53.5	2.304	106	9.5	5.5	16
44	9.5	5.5	16	107	50.5	53.5	9
45	50.5	53.5	9	108	50.5	53.5	9
46	50.5	53.5	9	109	101.5	108.5	49
47	101.5	108.5	49	110	9.5	53.5	1,936
48	9.5	53.5	1,936	111	50.5	53.5	9
49	50.5	53.5	9	112	50.5	108.5	3.364
50	50.5	108.5	3.364	113	101.5	53.5	2.304
51	101.5	53.5	2.304	114	50.5	53.5	9
52	50.5	53.5	9	115	50.5	53.5	9
53	50.5	53.5	9	116	101.5	122.5	441
54	101.5	122.5	441	117	9.5	53.5	1,936
55	9.5	53.5	1,936	118	101.5	108.5	49
56	101.5	108.5	49	119	50.5	53.5	9
57	50.5	53.5	9	120	50.5	53.5	9
58	50.5	53.5	9	121	50.5	53.5	9
59	50.5	53.5	9	122	50.5	53.5	9
60	50.5	53.5	9	123	101.5	53.5	2.304
61	101.5	53.5	2.304	124	101.5	108.5	49
62	101.5	108.5	49	d2			<b>86,940</b>
63	9.5	5.5	16				

*Source: Variations of respondents' answers in appendix – 2.*

$$\begin{aligned}
r_1 &= 1 - \frac{6 \sum D^2}{n(n^2 - 1)} \\
&= 1 - \frac{6 (86.940)}{124 (124^2 - 1)} \\
&= 1 - \frac{521.640}{1.906.500} \\
&= 1 - 0,2736 = 0,7264
\end{aligned}$$

The interpretation of the Spearman Rank Correlation Coefficient value is identical to the product moment correlation interpretation technique. The range of Spearman Rank Correlation Coefficient values also varies from  $-1$  to  $+1$ . The closer the correlation value is to  $\pm 1$ , the stronger the influence of certain determinants on consumer interest; conversely, the higher the value of the correlation coefficient is close to  $0$ , the weaker the influence of certain determinants on consumer interest.

The correlation coefficient value of  $0.7264$  obtained from the measurement results above is quite close to positive one, so it can be said that the reputation of the Express Bahari shipping airline has a strong enough influence on consumer interest in using sea transportation service products offered by this transportation fleet. The results of this analysis are in accordance with actual conditions which indicate that there are groups of consumers who tend to feel more prestigious when using this transportation fleet, and there are even consumer groups who make the airline's reputation in terms of prestige or prestige their main factor in choosing and being interested in the Express fleet. Nautical.

### 3.2 Relationship between Sailing Convenience (A2) and Consumer Interest (M)

**Table 2.** Procedure for Measurement of Correlation Between Sailing Comfort ( A2 ) and Consumer Interest in Using Maritime Express Transportation Services

No.	A2	M	( A2 – M )2	No.	A2	M	( A2 – M )2
01	4.5	5.5	1	64	121.5	122.5	1
02	121.5	122.5	1	65	46.5	53.5	49
03	46.5	53.5	49	66	46.5	53.5	49
04	46.5	53.5	49	67	46.5	53.5	49
05	46.5	53.5	49	68	101.5	108.5	49
06	101.5	108.5	49	69	46.5	53.5	49
07	46.5	53.5	49	70	46.5	53.5	49
08	46.5	53.5	49	71	46.5	53.5	49
09	46.5	53.5	49	72	46.5	5.5	1,681
10	46.5	5.5	1,681	73	46.5	53.5	49
11	46.5	53.5	49	74	101.5	108.5	49
12	101.5	108.5	49	75	46.5	53.5	49
13	46.5	53.5	49	76	101.5	53.5	2.304
14	101.5	53.5	2.304	77	46.5	53.5	49

15	46.5	53.5	49	78	46.5	53.5	49
16	46.5	53.5	49	79	101.5	108.5	49
17	101.5	108.5	49	80	46.5	53.5	49
18	46.5	53.5	49	81	101.5	53.5	2.304
19	101.5	53.5	2.304	82	46.5	53.5	49
20	46.5	53.5	49	83	4.5	5.5	1
21	4.5	5.5	1	84	46.5	53.5	49
22	46.5	53.5	49	85	101.5	108.5	49
23	101.5	108.5	49	86	46.5	53.5	49
24	46.5	53.5	49	87	101.5	53.5	2.304
25	101.5	53.5	2.304	88	4.5	5.5	1
26	4.5	5.5	1	89	46.5	53.5	49
27	46.5	53.5	49	90	46.5	53.5	49
28	46.5	53.5	49	91	101.5	108.5	49
29	101.5	108.5	49	92	46.5	53.5	49
30	46.5	53.5	49	93	46.5	53.5	49
31	46.5	53.5	49	94	101.5	108.5	49
32	101.5	108.5	49	95	46.5	53.5	49
33	46.5	53.5	49	96	46.5	53.5	49
34	46.5	53.5	49	97	46.5	53.5	49
35	46.5	53.5	49	98	101.5	108.5	49
36	101.5	108.5	49	99	46.5	53.5	49
37	46.5	53.5	49	100	46.5	53.5	49
38	46.5	53.5	49	101	46.5	53.5	49
39	46.5	53.5	49	102	101.5	53.5	2.304
40	101.5	53.5	2.304	103	121.5	108.5	169
41	121.5	108.5	169	104	46.5	53.5	49
42	46.5	53.5	49	105	46.5	53.5	49
43	46.5	53.5	49	106	4.5	5.5	1
44	4.5	5.5	1	107	101.5	53.5	2.304
45	101.5	53.5	2.304	108	46.5	53.5	49
46	46.5	53.5	49	109	101.5	108.5	49
47	101.5	108.5	49	110	46.5	53.5	49
48	46.5	53.5	49	111	46.5	53.5	49
49	46.5	53.5	49	112	101.5	108.5	49
50	101.5	108.5	49	113	46.5	53.5	49
51	46.5	53.5	49	114	46.5	53.5	49
52	46.5	53.5	49	115	46.5	53.5	49
53	46.5	53.5	49	116	121.5	122.5	1
54	121.5	122.5	1	117	46.5	53.5	49
55	46.5	53.5	49	118	101.5	108.5	49
56	101.5	108.5	49	119	46.5	53.5	49
57	46.5	53.5	49	120	101.5	53.5	2.304
58	101.5	53.5	2.304	121	46.5	53.5	49
59	46.5	53.5	49	122	46.5	53.5	49
60	46.5	53.5	49	123	46.5	53.5	49
61	46.5	53.5	49	124	101.5	108.5	49

62	101.5	108.5	49	d2	<b>36,064</b>
63	4.5	5.5	1		

Source: Variations of respondents' answers in appendix – 2.

$$\begin{aligned}
 r_2 &= 1 - \frac{6 (36.064)}{124 (124^2 - 1)} \\
 &= 1 - \frac{216.384}{1.906.500} \\
 &= 1 - 0,1135 = 0,8865
 \end{aligned}$$

The correlation coefficient value of 0.8865 is close to positive one, so it can be said that comfort during the cruise is one of the determinants that has a relatively strong influence on consumer interest in using sea transportation service products offered by the Express Bahari transportation fleet.

### 3.3 Relationship between Price Level (A7) and Consumer Interest (M)

**Table 3.** Procedure for Measurement of Correlation Between Price Levels ( A7) and Consumer Interest in Using Maritime Express Transportation Services

No.	A7	M	( A7 – M )2	No.	A7	M	( A7 – M )2
01	50.5	5.5	2.025	64	101.5	122.5	441
02	101.5	122.5	441	65	50.5	53.5	9
03	50.5	53.5	9	66	50.5	53.5	9
04	50.5	53.5	9	67	101.5	53.5	2.304
05	101.5	53.5	2.304	68	101.5	108.5	49
06	101.5	108.5	49	69	9.5	53.5	1,936
07	9.5	53.5	1,936	70	9.5	53.5	1,936
08	9.5	53.5	1,936	71	50.5	53.5	9
09	50.5	53.5	9	72	50.5	5.5	2.025
10	50.5	5.5	2.025	73	50.5	53.5	9
11	50.5	53.5	9	74	101.5	108.5	49
12	101.5	108.5	49	75	9.5	53.5	1,936
13	9.5	53.5	1,936	76	101.5	53.5	2.304
14	101.5	53.5	2.304	77	101.5	53.5	2.304
15	101.5	53.5	2.304	78	50.5	53.5	9
16	50.5	53.5	9	79	50.5	108.5	3.364
17	50.5	108.5	3.364	80	50.5	53.5	9
18	50.5	53.5	9	81	50.5	53.5	9
19	50.5	53.5	9	82	9.5	53.5	1,936
20	9.5	53.5	1,936	83	50.5	5.5	2.025
21	50.5	5.5	2.025	84	101.5	53.5	2.304
22	101.5	53.5	2.304	85	50.5	108.5	3.364
23	50.5	108.5	3.364	86	50.5	53.5	9
24	50.5	53.5	9	87	122.5	53.5	4.761

25	122.5	53.5	4.761	88	9.5	5.5	16
26	9.5	5.5	16	89	101.5	53.5	2.304
27	101.5	53.5	2.304	90	50.5	53.5	9
28	50.5	53.5	9	91	50.5	108.5	3.364
29	50.5	108.5	3.364	92	101.5	53.5	2.304
30	101.5	53.5	2.304	93	9.5	53.5	1,936
31	9.5	53.5	1,936	94	50.5	108.5	3.364
32	50.5	108.5	3.364	95	101.5	53.5	2.304
33	101.5	53.5	2.304	96	50.5	53.5	9
34	50.5	53.5	9	97	101.5	53.5	2.304
35	101.5	53.5	2.304	98	50.5	108.5	3.364
36	50.5	108.5	3.364	99	50.5	53.5	9
37	50.5	53.5	9	100	50.5	53.5	9
38	50.5	53.5	9	101	50.5	53.5	9
39	50.5	53.5	9	102	122.5	53.5	4.761
40	122.5	53.5	4.761	103	101.5	108.5	49
41	101.5	108.5	49	104	50.5	53.5	9
42	50.5	53.5	9	105	101.5	53.5	2.304
43	101.5	53.5	2.304	106	50.5	5.5	2.025
44	50.5	5.5	2.025	107	9.5	53.5	1,936
45	9.5	53.5	1,936	108	50.5	53.5	9
46	50.5	53.5	9	109	101.5	108.5	49
47	101.5	108.5	49	110	9.5	53.5	1,936
48	9.5	53.5	1,936	111	50.5	53.5	9
49	50.5	53.5	9	112	50.5	108.5	3.364
50	50.5	108.5	3.364	113	101.5	53.5	2.304
51	101.5	53.5	2.304	114	50.5	53.5	9
52	50.5	53.5	9	115	50.5	53.5	9
53	50.5	53.5	9	116	101.5	122.5	441
54	101.5	122.5	441	117	9.5	53.5	1,936
55	9.5	53.5	1,936	118	101.5	108.5	49
56	101.5	108.5	49	119	50.5	53.5	9
57	50.5	53.5	9	120	50.5	53.5	9
58	50.5	53.5	9	121	50.5	53.5	9
59	50.5	53.5	9	122	50.5	53.5	9
60	50.5	53.5	9	123	101.5	53.5	2.304
61	101.5	53.5	2.304	124	101.5	108.5	49
62	101.5	108.5	49	d2			<b>160,056</b>
63	50.5	5.5	2.025				

*Source: Variations of respondents' answers in appendix – 2.*

$$\begin{aligned}
r_7 &= 1 - \frac{6 (160.056)}{124 (124^2 - 1)} \\
&= 1 - \frac{960.336}{1.906.500} \\
&= 1 - 0,5037 = 0,4963
\end{aligned}$$

The value of the Correlation Coefficient of 0.4963 indicates that the price level has a weak influence and may not even have a significant effect on consumer interest in using marine transportation service products offered by Express Bahari motorboats.

The objective condition shows that the price of the Express Bahari motorboat is very expensive, even more than twice the price of other transportation fleets. Although the fare is expensive, the public's interest in using this transportation fleet is very large; even today the Express Bahari transportation fleet is estimated to be in the position of Market Leader (Market Leader). The price level that is expensive but has the largest market share shows that the price level does not have a significant influence on consumers in using Express Bahari sea transportation.

### 3.4 Relationship between Roaming Speed (A8) and Consumer Interest (M)

**Table 4.** Procedure for Measurement of Correlation Between Roaming Speeds ( A8) and Consumer Interest in Using Maritime Express Transportation Services

No.	A8	M	( A8 – M )2	No.	A8	M	( A8 – M )2
01	6.5	5.5	1	64	123.5	122.5	1
02	123.5	122.5	1	65	54.5	53.5	1
03	54.5	53.5	1	66	54.5	53.5	1
04	54.5	53.5	1	67	54.5	53.5	1
05	54.5	53.5	1	68	109.5	108.5	1
06	109.5	108.5	1	69	54.5	53.5	1
07	54.5	53.5	1	70	54.5	53.5	1
08	54.5	53.5	1	71	54.5	53.5	1
09	54.5	53.5	1	72	6.5	5.5	1
10	6.5	5.5	1	73	54.5	53.5	1
11	54.5	53.5	1	74	109.5	108.5	1
12	109.5	108.5	1	75	54.5	53.5	1
13	54.5	53.5	1	76	54.5	53.5	1
14	54.5	53.5	1	77	54.5	53.5	1
15	54.5	53.5	1	78	54.5	53.5	1
16	54.5	53.5	1	79	109.5	108.5	1
17	109.5	108.5	1	80	54.5	53.5	1
18	54.5	53.5	1	81	54.5	53.5	1
19	54.5	53.5	1	82	54.5	53.5	1
20	54.5	53.5	1	83	6.5	5.5	1
21	6.5	5.5	1	84	54.5	53.5	1
22	54.5	53.5	1	85	109.5	108.5	1
23	109.5	108.5	1	86	54.5	53.5	1

24	54.5	53.5	1	87	54.5	53.5	1
25	54.5	53.5	1	88	6.5	5.5	1
26	6.5	5.5	1	89	54.5	53.5	1
27	54.5	53.5	1	90	54.5	53.5	1
28	54.5	53.5	1	91	109.5	108.5	1
29	109.5	108.5	1	92	54.5	53.5	1
30	54.5	53.5	1	93	54.5	53.5	1
31	54.5	53.5	1	94	109.5	108.5	1
32	109.5	108.5	1	95	54.5	53.5	1
33	54.5	53.5	1	96	54.5	53.5	1
34	54.5	53.5	1	97	54.5	53.5	1
35	54.5	53.5	1	98	109.5	108.5	1
36	109.5	108.5	1	99	54.5	53.5	1
37	54.5	53.5	1	100	54.5	53.5	1
38	54.5	53.5	1	101	54.5	53.5	1
39	54.5	53.5	1	102	54.5	53.5	1
40	54.5	53.5	1	103	109.5	108.5	1
41	109.5	108.5	1	104	54.5	53.5	1
42	54.5	53.5	1	105	54.5	53.5	1
43	54.5	53.5	1	106	6.5	5.5	1
44	6.5	5.5	1	107	54.5	53.5	1
45	54.5	53.5	1	108	54.5	53.5	1
46	54.5	53.5	1	109	109.5	108.5	1
47	109.5	108.5	1	110	54.5	53.5	1
48	54.5	53.5	1	111	54.5	53.5	1
49	54.5	53.5	1	112	109.5	108.5	1
50	109.5	108.5	1	113	54.5	53.5	1
51	54.5	53.5	1	114	54.5	53.5	1
52	54.5	53.5	1	115	54.5	53.5	1
53	54.5	53.5	1	116	109.5	122.5	169
54	109.5	122.5	169	117	54.5	53.5	1
55	54.5	53.5	1	118	109.5	108.5	1
56	109.5	108.5	1	119	54.5	53.5	1
57	54.5	53.5	1	120	6.5	53.5	2.209
58	6.5	53.5	2.209	121	54.5	53.5	1
59	54.5	53.5	1	122	54.5	53.5	1
60	54.5	53.5	1	123	54.5	53.5	1
61	54.5	53.5	1	124	109.5	108.5	1
62	109.5	108.5	1	d2			<b>4.876</b>
63	6.5	5.5	1				

*Source: Variations of respondents' answers in appendix – 2.*

$$\begin{aligned}
r_8 &= 1 - \frac{6 (4.876)}{124 (124^2 - 1)} \\
&= 1 - \frac{29.256}{1.906.500} \\
&= 1 - 0,0153 = 0,9847
\end{aligned}$$

The correlation coefficient value between attribute A8 and consumer interest which is very close to positive one indicates that the cruise speed of Express Bahari motorboat has a very strong and positive influence on consumer interest in Waropen Bawah and Urei Faisei districts in choosing marine transportation fleets offered by PT. Belibis Papua Mandiri Biak Branch. The results of this analysis are in accordance with actual conditions which show that consumers generally choose this transportation fleet mainly because of its speed which far exceeds other shipping fleets.

Overall the results of the Spearman Rank Correlation analysis show that except for the price level, the other three determinants have a strong enough to very strong influence on consumer interest. The comparison between the four values of the Spearman Rank correlation coefficient shows that the order of the determinants from the strongest to the weakest has an effect on consumer interest in using Express Bahari motor boats in a row are: Roaming Speed attribute ( $r_8 = 0.9847$ ), Comfort Shipping ( $r_2 = 0.8865$ ), Airline Reputation ( $r_1 = 0.7264$ ), and the specified price level attribute ( $r_7 = 0.4963$ ).

#### IV. Conclusion

Referring to the results of data analysis and discussion, some conclusions can be drawn as follows:

1. The results of the Cochran Q-Test test show that there are four attributes that are most often taken into consideration for consumers in choosing certain marine transportation service products; respectively: Airline Reputation (Attribute A1), Sailing Convenience (Attribute A2), Price Level (A7) and Roaming Speed (Attribute A8). Meanwhile, four other attributes that are relatively less considered by consumers in the Waropen Bawah and Urei Faisei districts in using certain sea transportation services are: Departure Schedule Accuracy (A3), Sailing Frequency (A4), Fleet Capacity (A5), and Customer Service (A6).
2. Measurement of the weight of the order of Attribute Importance shows that the order of importance from the attributes that are considered the most important to the relatively less important attributes according to the subjective thoughts of consumers in a row are: Sailing Convenience (Attribute A2), Roaming Speed (A8), Price Level (A7), and Brand Reputation (Attribute A1).
3. The results of the partial correlation analysis based on the Spearman Rank Correlation Coefficient approach show that the largest partial correlation coefficient is found in the relationship between browsing speed and consumer interest ( $r_7 = 0.9847$ ) while the smallest correlation coefficient is found in the relationship between price levels and consumer interest ( $r_2 = 0.4963$ ). These results indicate that Roaming Speed is the main factor that stimulates consumers to use air transportation services offered by Express Bahari motorboats, while Price Level is the main factor that tends to limit consumers in using the marine transportation service products.

4. Although comparatively the price level of Express Bahari motor boat tickets is much more expensive than the price level of competing airlines; but because the services offered have a number of competitive advantages and comparative advantages that are able to satisfy consumer needs, the sea transportation service products offered by PT. Belibis Papua Mandiri Biak Branch is very attractive to consumers.

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