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Analysis Of E-Service Quality Factors That Affect E-Satisfaction

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Abstract: One of the fintech applications in the field of different bank fund transfer services for free is the Flip application. There were 59% positive comments which meant that customers felt that the Flip fintech application provided satisfaction with their use, and there were 41% negative comments that some of the obstacles experienced by users were usually related to tangibles, reliability, responsiveness, empathy and assurance. This study aims to determine the effect of the dimensions of E-service Quality on E-satisfaction. The results of the respondents who received as many as 100 respondents. Data processing using SPSS v26 software. The results of the descriptive research show 1) E-satisfaction is in the good category. 2) Tangibles are in the good category. 3) Reliability is in very good category. 4) Responsiveness is in the very good category. 5) Empathy is in the very good category. 6) Assurance is in the good category. 7) Tangibles with e-satisfaction have a very weak correlation, the determination value is 3.3% and Tangibles have no effect on e-satisfaction. 8) Reliability with e-satisfaction has a weak correlation, determination value is 8.6% and Reliability has no effect on e-satisfaction. 9) Responsiveness with e-satisfaction has a weak correlation, determination value is 10.6% and Responsiveness has no effect on e-satisfaction. 10) Respondents' empathy for e-satisfaction has a weak correlation, the determination value is 5.9% and empathy has no effect on e-satisfaction. 11) Assurance with e-satisfaction has a moderate correlation, the determination value is 16.9% and Assurance has an effect on e-satisfaction. 12) Simultaneously the e-service quality variables, namely tangibles, reliability, responsiveness, empathy, and assurance, have a positive and significant influence on e-satisfaction.

Keywords: Tangibles, Reliability, Responsiveness, Emphaty, Assurance, E-satisfaction

INTRODUCTION

Technological sophistication has brought society to more diverse financial technologies, such as mobile banking. Therefore, with the existence of mobile banking and the increasing number of modern e-commerce, the financial world is able to combine technology with finance. So financial technology emerged or could be called financial technology.

One of the fintech applications in the field of free fund transfer services between banks is the Flip application. Flip is a start-up business that carries out inter-bank transfer service business activities without administration fees, the Flip application is a digital service that can be accessed via Android, iOS or website. Flip was founded in 2015, created and developed by the management of PT. Fliptech Lantern Pertiwi Inspiration. Flip has services such as Flip+, Flip for

Business, and Flip Globe which have transfer fees for each transaction. Apart from that, Flip also makes profits from sales of digital products such as credit, data packages, PLN electricity and E-Wallet top-ups.

Flip received a license from Bank Indonesia (BI) on October 4 2016 with license number 18/196/DKSP/68 so that security and user data can be maintained. Fintech solutions for individual needs on the Flip application include inter-bank transfers and e-wallet top-ups without admin fees, international transfers (Flip Globe), and digital product purchases (top up credit, data packages, electricity tokens, pay electricity bills). The following are several fintech startups in Indonesia as follows:

Table 1: Startup Fintech Indonesia

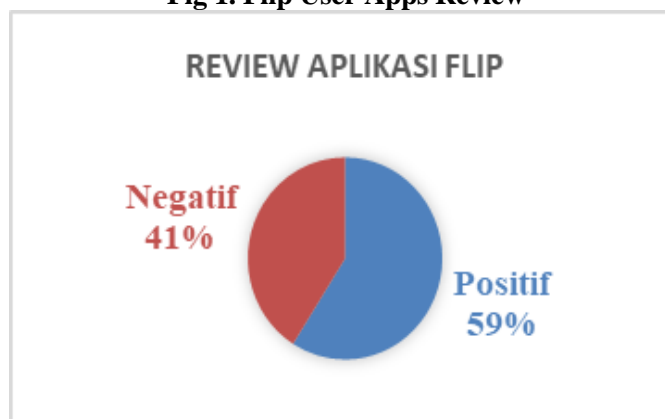
No	Application	Download	Rating Google Play Store	Rating Apple App Store
1	PayPal	100 juta+	3.7	4.6
2	Flip	10 juta+	4.5	4.8
3	OY! Indonesia	1 juta+	3.7	3.5

Source: Sensor Tower 2022

In table 1.1 it can be seen that Flip has a good rating in the app store and play store when compared to its competitors, this indicates that many customers are satisfied using the Flip application. User satisfaction is the level of customer or consumer feelings after receiving a product or service from a company. User satisfaction influences the use of the services provided, thereby affecting company revenue.

In general, customers who are satisfied with a product or service will use the product on an ongoing basis. Below is a user review of the Flip application as follows:

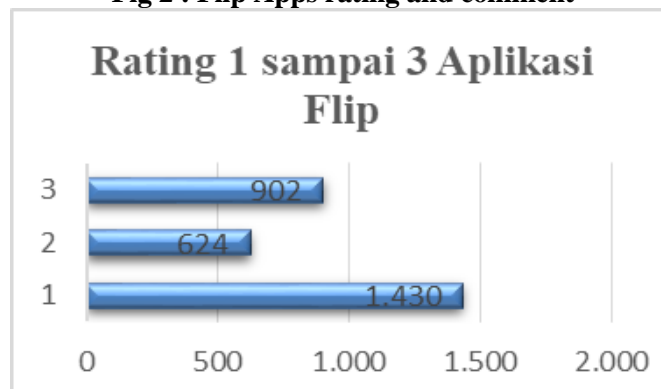
Fig 1. Flip User Apps Review



Source : Sensor Tower 2022

From the picture above, 59% of customers have positive comments, which means that customers feel that the Flip Fintech application provides satisfaction with their use, and another 41% of customers have negative comments, which has an impact on decreasing the level of customer satisfaction for users of the Flip Fintech application. Sensor Tower is a website known for its application research to collect application user data. Ratings and reviews are verified and come from people who use the same type of device, namely as follows:

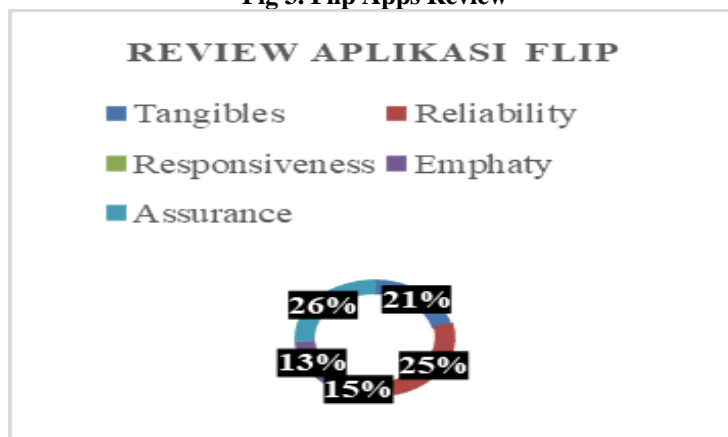
Fig 2 : Flip Apps rating and comment



Source : Google Play store (2022)

From the ratings given by Flip application users in the image, it shows that rating 1 has a total of 1,430 reviews, rating 2 has a total of 624 reviews and rating 3 has a total of 902 reviews. Several critical reviews relevant to service quality taken from the latest 100 active users who used and downloaded the Flip application on the Google Play Store can be stated as follows:

Fig 3. Flip Apps Review



Source: Google Play store (2023)

From the picture above, it can be seen that even though Flip has become the number two fund transfer application in Indonesia, there are still application users or customers who feel dissatisfied because they experience problems when using the Flip application. Some of the obstacles experienced by users are usually related to tangibles, reliability, responsiveness, empathy and assurance, including obstacles to upgrading Flip, difficulty logging in, failure to carry out transactions, slow responses, concerns about loss of funds or fraud and so on. The obstacles felt by users will be at very high risk, because the applications used by users give rise to perceptions that will affect the level of satisfaction.

Various empirical research has tested several factors that influence E-satisfaction. The results of this research are supported by previous research conducted by Muhammad Rifqi Albanna, Nofiawatyb, Dessy Yunitac (2022), regarding the Influence of E-Service Quality on E-Satisfaction among Tokopedia Consumers in Palembang City. The research results show that simultaneously, E-Service Quality influences the E-Satisfaction of Tokopedia consumers in the city of Palembang.

Based on the explanation above, this research aims to analyze the E-service Quality Factors that Influence E-satisfaction (Study of Flip Application Users) with the following problem formulation:

- 1) What is the description of E-satisfaction, Tangibles, Reliability, Responsiveness, Emphaty, and assurance among Flip application users?
- 2) What is the influence of Tangibles, Reliability, Responsiveness, Emphaty, and assurance on the E-satisfaction of the Flip application, both partially and simultaneously

LITERATURE REVIEW

According to Kotler and Keller (2018: 138), satisfaction is a person's feeling of happiness or disappointment that arises from comparing the product's perceived performance (results) against their expectations. If performance fails to meet expectations, customers will be dissatisfied. If performance meets expectations, customers will be satisfied. Apart from that, if performance exceeds expectations, customers will be very satisfied or happy.

Meanwhile, according to Tjiptono (2017:45), user satisfaction is a basic element in modern marketing thinking and practice. Based on the theory above, it can be concluded that customer satisfaction is a customer response in the form of feelings or assessments regarding product use where their expectations and needs are met.

According to Kotler and Keller (2018:140), E-satisfaction has several dimensions, namely:

- 1) Remain loyal, customers who are satisfied with a product will tend to become loyal and these customers will make repeat purchases from the same manufacturer.
- 2) Buy new company products and renew products, because they feel satisfied, customers have the desire to buy the products offered because they want to repeat the experience received after consume the product. Apart from that, customers are willing to provide suggestions and input to manufacturers so that companies can produce better goods or services.
- 3) Recommend products, satisfied customers will be encouraged to communicate positively by word of mouth about the company and its products to other people. This can take the form of recommendations to other potential customers.
- 4) Paying less attention to competing brands and less sensitive to price, customers are willing to pay more to the company because they already trust the company. They have the perspective that if the price is higher, the quality will also be higher.

The definition of tangibles according to Wang & Wang in Felix (2017: 5) is new equipment, attractive facilities, professional appearance, and material related to service. Meanwhile, according to Na in Eshetie et al (2016:75) Tangibles can be seen from the atmosphere and general appearance of physical facilities, rooms, restaurants, communication equipment and employees. Tjiptono (2014:282) physical evidence (tangibles) is real evidence or attributes regarding physical appearance, equipment, personnel and communication materials.

According to Tjiptono (2016:163), there are dimensions to measure tangibles, namely:

- 1) Facility View
 - a. Materials related to services that are visually attractive
- 2) Equipment
 - a. Modern equipment

Responsiveness

Based on Parasuraman in Yarimoglu (2014: 83) responsiveness is the willingness and readiness of employees to provide services, punctuality and providing services quickly. Wang & Wang in Felix (2017: 5) define responsiveness as relating to the willingness to help and respond to customer requests, fast service, always providing information to customers about the time period for service. Meanwhile, according to Tjiptono (2014:282) responsiveness is the staff's desire to help customers and provide responsive services.

According to Tjiptono (2016: 137), there are dimensions to measure responsiveness, namely:

1. Provide the relevant services quickly

- a. Fast service for users.
2. Respond to user requests
 - a. Readiness to respond to customer requests.

Reliability

According to Wang & Wang in Felix (2017: 5) states that reliability is reflected in providing services as promised in a timely manner and being able to handle problems well. Likewise, stated by Albarq (2013: 702), reliability is the ability to carry out promised services with an accurate and reliable attitude. Meanwhile, according to Tjiptono (2014: 282), reliability is the ability of service providers to provide promised services immediately, accurately and satisfactorily.

According to Tjiptono (2016: 137), there are dimensions to measure reliability, namely:

1. Accurate service without errors
 - a. Reliable in handling customer service problems.
2. deliver these services in a timely manner
 - a. Deliver services according to the promised time.

Empathy

According to Wang & Wang in Felix (2017: 5) empathy is about providing individual attention, serving with care and understanding customer needs. Meanwhile, according to Tjiptono in Panjaitan et al (2016: 270) empathy includes ease in establishing relationships, good communication, personal attention, and understanding of customers' individual needs. The statement given by Donkoh et al. (2012:217) empathy can be described as caring and paying attention to individual consumers.

According to Tjiptono (2016: 137), there are dimensions to measure empathy, namely:

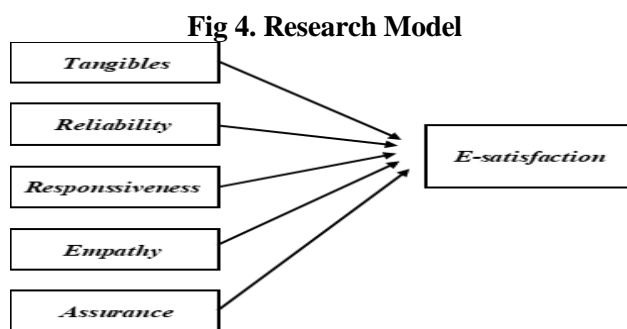
- 1) Actual Needs
 - a. The company's understanding of customer problems and willingness to act in the interests of its customers
- 2) Customer Desires
 - a. Provide personal attention to customers and have comfortable operating hours.

Assurance

Proposed by Parasuraman et al. in Yarimoglu (2014:85) assurance as knowledge and employee courtesy and the ability to build trust and confidence. Wang & Wang in Felix (2017: 5) state that assurance means that customers feel safe in transactions, consistent employee politeness and employee ability to answer every customer question. Meanwhile, according to Tjiptono (2014: 282) assurance includes the knowledge, competence, politeness and trustworthiness of staff, free from danger, risk or doubt.

According to Tjiptono (2016: 163), there are dimensions to measure assurance, namely:

- 1) Grow users' trust
 - a. A company that fosters customer trust.
- 2) Make users feel safe
 - a. Feel safe when making transactions.



Source: Author 2022

Research Hypothesis

- H1: There is an influence of Tangibles on E-satisfaction.
- H2: There is an influence of Reliability on E-satisfaction.
- H3: There is an influence of Responsiveness on E-satisfaction.
- H4: There is an influence of Empathy on E-satisfaction.
- H5: There is an influence of Assurance on E-satisfaction.
- H7: There is an influence of Tangible, Reliability, Responsiveness, Empathy, and Assurance on E-satisfaction.

RESEARCH METHODS

In this research, the research method used is a quantitative method with a descriptive and verification approach to determine the relationship between Tangibles, Reliability, Responsiveness, Empathy and Assurance towards E-satisfaction.

The population in this study consisted of 10,000,000 Flip application user downloads. From this population a sample is drawn, namely a portion of the population that will be studied and is considered representative to represent the population. This sample was carried out because of the limitations of researchers in conducting research both in terms of time, energy, funds and a very large population. The sample in this study was 100 respondents.

Descriptive analysis is carried out by compiling frequency distribution tables, this is to find out the data collected and then processed and analyzed to reach conclusions. Descriptive analysis is used to answer problem formulations related to Tangibles (X1), Reliability (X2), Responsiveness (X3), Empathy (X4), and Assurance (X5) regarding E-satisfaction in the Flip application.

RESULTS AND DISCUSSION

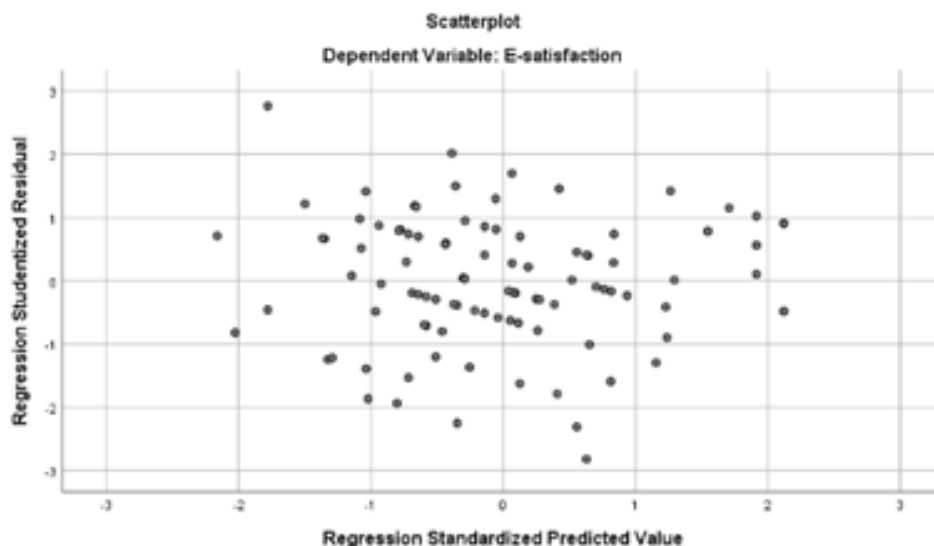
Table 2: Normality test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.17255703
Most Extreme Differences	Absolute	.073
	Positive	.043
	Negative	-.073
Test Statistic		.073
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.
 b. Calculated from data.
 c. Lilliefors Significance Correction.
 d. This is a lower bound of the true significance.
 Source: Questionnaire data processed by SPSS 26 (2023)

Based on the results in Table 2 Normality Test using One-Sample Kolmogorov-Smirnov Test shows that the overall variable results are 0.200. This means that the data test results are normally distributed because they are greater than 0.05 and this shows that the data meets the normality assumption.

Figure 5 : Heteroscedasticity Test



Source: Questionnaire data processed by SPSS 26 (2023)

Based on Figure 4.14, it can be seen that the results of the heteroscedasticity test in this study do not form a clear pattern or a particular pattern. However, the points spread above and below the number 0 on the Y axis, meaning that there is no heteroscedasticity where the data from the respondents' responses are related to each other.

Table 3. Multicollinearity Test

		Coefficients ^a						Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients					
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF	
1	(Constant)	3.359	2.519		1.334	.186			
	Tangibles	.267	.240	.101	1.114	.268	.956	1.046	
	Reliability	.096	.313	.036	.306	.761	.559	1.788	
	Responsiveness	.476	.311	.175	1.528	.130	.598	1.671	
	Emphaty	.443	.272	.154	1.629	.107	.877	1.141	
	Assurance	.554	.153	.337	3.610	.000	.902	1.108	

a. Dependent Variable: E-satisfaction

Source: Questionnaire data processed by SPSS 26 (2023)

In this research, multiple linear regression analysis was used to answer the hypothesis proposed by researchers to determine the magnitude of the influence of the independent variable e-service quality (X), namely tangibles, reliability, responsiveness, empathy, and assurance on the variable (Y) e-satisfaction.

Partial Correlation Coefficient

- 1) The correlation between tangibles and e-satisfaction has a value of 0.183 in the interval 0.000 – 0.199, which means there is a very weak positive correlation between tangibles and e-satisfaction.
- 2) The correlation between reliability and e-satisfaction has a value of 0.294 in the interval 0.200 – 0.399, which means there is a positive correlation weak relationship between reliability and e-satisfaction.

- 3) The correlation between responsiveness and e-satisfaction has a value of 0.326 in the interval 0.200 – 0.399, which means there is a weak positive correlation between responsiveness and e-satisfaction.
- 4) The correlation between empathy and e-satisfaction has a value of 0.243 in the interval 0.200 – 0.399, which means there is a weak positive correlation between empathy and e-satisfaction.
- 5) The correlation between assurance and e-satisfaction has a value of 0.411 in the interval 0.400 – 0.599, which means there is a moderate positive correlation between assurance and e-satisfaction.

Simultaneous Correlation Coefficient

The correlation between tangibles, reliability, responsiveness, empathy and assurance with e-satisfaction simultaneously is 0.512, meaning there is a moderate relationship between the five variables because they are in the interval 0.400 – 0.599 and the correlation is positive.

1) Coefficient of Determination X₁ against Y

The R square result (coefficient of determination) is 0.033. This means that 3.3% of the tangibles variables have a weak effect on e-satisfaction. Meanwhile, the remaining 96.7% was influenced by other factors that were not researched.

2) Coefficient of Determination X₂ against Y

The R square result (coefficient of determination) is 0.086. This means that 8.6% of the reliability variables have a weak effect on e-satisfaction. Meanwhile, the remaining 91.4% was influenced by other factors that were not researched.

3) Coefficient of Determination X₃ against Y

The R square result (coefficient of determination) is 0.106. This means that 10.6% of the responsiveness variable has a weak effect on e-satisfaction. Meanwhile, the remaining 89.4% was influenced by other factors that were not researched.

4) Coefficient of Determination X₄ against Y

The R square result (coefficient of determination) is 0.059. This means that 5.9% of the empathy variable has a weak effect on e-satisfaction. Meanwhile, the remaining 94.1% was influenced by other factors not studied.

5) Coefficient of Determination X₅ against Y

The R square result (coefficient of determination) is 0.169. This means that 16.9% of the assurance variables have a strong influence on e-satisfaction. Meanwhile, the remaining 83.1% was influenced by other factors that were not researched.

6) Analysis of the Determination Coefficient X₁ X₂ X₃ X₄ X₅ against Y

The R square result (coefficient of determination) is 0.262. This means that 26.2% of the tangibles, reliability, responsiveness, empathy and assurance variables have a weak influence on e-satisfaction. Meanwhile, the remaining 73.8% was influenced by other factors that were not researched.

Partial Hypothesis Test (t Test)

1) Tangibles

The significant level (α) is 5% and the degree of freedom (v) = 100-2 = 98, the t table value is 1.661. From the table above, it shows that tangibles have a calculated t value < t table (1.114 < 1.661) and with a sig value of 0.268 > 0.05, then Ho is accepted and H1 is rejected, which means that there is partially no influence from tangibles on e-satisfaction.

2) Reliability

The significant level (α) is 5% and the degree of freedom (v) = 100-2 = 98, the t table value is 1.661. From the table above, it shows that reliability has a calculated t value < t table (0.306 < 1.661) and with a sig value of 0.761 > 0.05, then Ho is accepted and H1 is rejected, which means that there is partially no influence of reliability on e-satisfaction.

3) Responsiveness

The significant level (α) is 5% and the degree of freedom (v) = $100-2 = 98$, the t table value is 1.661. From the table above, it shows that responsiveness has a calculated t value $<$ t table (1.528, $<$ 1.661) and with a sig value of $0.130 > 0.05$, then H_0 is accepted and H_1 is rejected, which means that there is partially no influence from responsiveness on e-satisfaction.

4) Empathy

The significant level (α) is 5% and the degree of freedom (v) = $100-2 = 98$, the t table value is 1.661. From the table above, it shows that empathy has a calculated t value $<$ t table (1.629 $<$ 1.661) and with a sig value of $0.107 > 0.05$, then H_0 accepted and H_1 rejected, which means that there is partially no influence of empathy on e-satisfaction.

5) Assurance

The significant level (α) is 5% and the degree of freedom (v) = $100-2 = 98$, the t table value is 1.661. From the table above, it shows that assurance has a t value $>$ t table ($3.610 >$ 1.661) and with a sig value of $0.000 < 0.05$, then H_0 is rejected and H_1 is accepted, which means that there is a partial influence of assurance on e-satisfaction.

Simultaneous Hypothesis Test (f Test)

The F count is 6.667 with a p-value (sign) of 0.000 with $\alpha = 0.05$ and degrees of freedom $N_2 = 100 - 2 = 98$ and $N_1 = 5-1 = 4$, then the F table value is 2.46, meaning the F count is greater From the F table ($6.667 > 2.46$) and a significance level of $0.00 < 0.05$, H_0 is rejected and H_6 is accepted. Thus, the research hypothesis states that e-service quality, namely tangibles (X1), reliability (X2), responsiveness (X3), empathy (X4), and assurance (X5), simultaneously has a significant influence on e-satisfaction (Y).

CONCLUSIONS AND SUGGESTIONS

Conclusion

- 1) E-satisfaction received an assessment in the good category where there is one indicator, namely the dimension of remaining loyal, which received the lowest score among others even though various positive and negative things have been experienced.
- 2) E-service Quality (Tangibles) received an assessment in the good category where there was one indicator, namely the initial appearance of Flip, which received the lowest score among the others.
- 3) E-service Quality (Reliability) received an assessment in the very good category where there is one indicator, namely 'service that accurately meets user expectations', which received the lowest score among the others.
- 4) E-service Quality (Responsiveness) received an assessment in the very good category where there is one indicator, namely 'able to help users and provide services quickly and precisely with clear information delivery', getting the lowest score among the others.
- 5) E-service Quality (Empathy) received an assessment in the very good category where there is one indicator, namely 'understanding the specific needs and desires of users so that it is comfortable for users in the operating process', getting the lowest score among the others.
- 6) E-service Quality (Assurance) received an assessment in the good category where there is one indicator, namely being able to provide guarantees in terms of communication and knowledge, which turned out to get the lowest score among the others.
- 7) Tangibles variable (X1) does not have a significant influence on E-satisfaction (Y) in the Flip application because the hypothesis result is greater than the predetermined significance.
- 8) Reliability variable (X2) does not have a significant influence on E-satisfaction (Y) in the Flip application because the hypothesis result is greater than the predetermined significance.

- 9) Responsiveness variable (X_3) does not have a significant influence on E-satisfaction (Y) in the Flip application because the hypothesis result is greater than the predetermined significance.
- 10) Emphaty variable (X_4) does not have a significant influence on E-satisfaction (Y) in the Flip application because the hypothesis result is greater than the predetermined significance.
- 11) Assurance variable (X_5) does not have a significant influence on E-satisfaction (Y) in the Flip application because the hypothesis result is greater than the predetermined significance.
- 12) E-service quality which consists of Tangibles (X_1), Reliability (X_2), Responsiveness (X_3), Emphaty (X_4), and Assurance (X_5) has a significant influence on E-satisfaction (Y) in the Flip application simultaneously because the hypothesis result is smaller than the predetermined significance.

Recommendation

- 1) Flip needs to pay attention to the loyalty of existing users so that there is continuous repeat use.
- 2) Flip needs to improve the initial appearance of the application to make it more attractive, especially for novice users.
- 3) Flip needs to improve its customer service capabilities in terms of providing accurate information about the Flip application according to user expectations.
- 4) Flip needs to increase customer service responsiveness in helping users and providing services quickly and precisely.
- 5) Flip needs to improve its customer service capabilities in terms of understanding specific user needs and desires so that users are comfortable in the operating process.
- 6) Flip needs to increase guarantees in terms of communication and knowledge of digital financial transactions for its users.
- 7) In an effort to improve e-service quality, Flip is advised to pay more attention to assurance factors, namely in terms of guaranteeing transaction security, especially accurate information regarding the security of digital financial transactions for its users.

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