

## THE RELATIONSHIP BETWEEN QUALITY OF THE JAMSOSTEK MOBILE TO CONSUMER SATISFACTION

Sony Ahmad Wardani<sup>1</sup>

<sup>1</sup>Universitas Sebelas Maret  
(e-mail: sony7.wardhany@gmail.com)

---

**Abstract:** *The purpose of this study was to determine the relationship between the quality of the Jamsostek Mobile Application and customer satisfaction. Respondents on this study were company participants that registered to BPJS Ketenagakerjaan through the Jamsostek Mobile application. The data collection technique used in this study was a survey, by distributing questionnaires to get 155 respondents. The results of this study indicate that the use of the Jamsostek Mobile application can impact to customer satisfaction, meaning that Jamsostek Mobile has increased customer satisfaction.*

**Keywords:** *Quality, Customer Satisfaction, Increased, Jamsostek Mobile*

---

### Introduction

The development of the times must always be followed by technological developments. In an all-digital era, it cannot be denied that most public services and services out there often take advantage of developing technology. Such as mobile banking, e-commerce, mobile applications and so on. This progress is none other than to make it easier for the community to carry out activities such as paying or purchasing goods. In addition, it also minimizes community mobilization in achieving goals. This will save transportation costs.

It is the same with BPJS Ketenagakerjaan which is developing a mobile application titled Jamsostek Mobile. Along with technological developments, BPJS Ketenagakerjaan continues to innovate to improve customer experience & satisfaction. JMO is built using the latest methodology and technology. JMO is a one stop solution where participants can access all BPJS Employment services such as payments, account registration, data updates, claim tracking and so on. JMO brings BPJS Employment services closer to participants because they can be accessed anytime, anywhere. Utilization of technology makes same day service possible through JMO. In addition, to reduce criminal acts through the application, the JMO application provides security in the form of an authentication method based on the confidentiality of information such as pins, passwords and private keys. In addition, there are also authentication methods based on biometrics such as fingerprints, face detectors and retinas.

According to data from BPJS Ketenagakerjaan, around 10 million people have downloaded the Jamsostek Mobile application. The rating on Google Playstore also reached 4.7. By looking at these trends, it can be perceived that many people are satisfied using BPJS Ketenagakerjaan through the JMO application. Even though in reality many have downloaded the application, there are still some people who make payments offline, either at minimarkets or at the BPJS Ketenagakerjaan office itself.

Queues and the ineffectiveness of offline payments are of course detrimental in terms of time and costs for consumers. Not to mention that queues can cause services from the BPJS to not be as optimal as usual. New problems arise that create anxiety for consumers.

This must be addressed immediately, one of them with the Jamsostek Mobile application. The phenomenon just mentioned is of course inversely proportional to the purpose of Employment BPJS to make it easier for consumers to make payments or register. No need to stand in line even to cause anxiety. This incident is inseparable from consumer behavior towards the JMO application, which they have been using for a long time.

Based on the background above, the authors formulate a problem about the extent to which the level of customer satisfaction with services on the Jamsostek Mobile Application. The purpose of this research is to find out and analyze customer satisfaction with the service quality of the Jamsostek Mobile application. The benefits of this research include as reference material for readers for further research in service companies, for researchers who are interested in researching the Jamsostek Mobile application, and also as an addition to add insight, as a reference for further similar research and as input and suggestions for BPJS Ketenagakerjaan companies. to pay more attention to service in order to create customer satisfaction and to improve the quality and service of the JMO application.

## **Theory Basis and Hypothesis Development**

### **Customer Satisfaction**

The definition of customer satisfaction according to Zeithaml, Bitner and Dwayne (2009:104) is, "Customer's evaluation of a product or service in terms of whether that product or service has met the customer's needs and expectations". According to Zeithaml et al, customer satisfaction is defined as a consumer's assessment of goods and services in terms of assessing whether the product or service meets consumer needs and expectations. While another definition according to Kotler and Keller (2009:164), "Satisfaction is a person's feelings of pleasure or disappointment that result from comparing a product's perceived performance (or outcome) to their expectations".

Satisfaction occupies a central and dominating position in marketing theory and practice because, as a primary outcome of marketing activity, satisfaction transforms initial consumption and purchase into post-purchase phenomena such as attitude change, re-support and brand loyalty.(Churcill & Suprenant, 1982). The American Customer Satisfaction Index is an important customer-based measurement system that assesses the performance of companies, industries and the national economy(Churcill & Suprenant, 1982).

Satisfaction is found when one's expectations match the perceived performance of the product/service(shukri),(Eboli & Mazulla, 2009). Loyalty is earned when a customer repurchases a service/product or recommends it to potential new customers (Allen, L, Forciniti, & et al, 2019). Customer satisfaction has a direct positive correlation with loyalty (Allen, L, Forciniti, & et al, 2019). Satisfied customers are loyal customers.

### **E-Service Quality (Quality of Service in Applications)**

E-Service Quality was developed to provide an evaluation of the services provided by the Internet network. According to Chase, et al., 2006 E-service quality is defined as an extension of the ability of a site to facilitate shopping, purchasing and distribution activities effectively and efficiently.

E-service quality according to Parasuraman, et al (2005) is defined as the ability of a site to provide effective and efficient facilities for online shopping, online purchases, and in obtaining goods or services.

According to Parasuraman, et al (2005) the dimensions of e-service quality can be assessed from:

- 1) Efficiency, namely the ability of customers to access the website, search for the desired product and information related to the product, and leave the site with minimal effort;
- 2) Fulfillment, one of the dimensions of electronic service quality which includes the company's actual performance in contrast to what is promised through the website, including the accuracy of service promises, such as the availability of products and service products according to the time promised;
- 3) System availability (System availability) is one dimension of electronic service quality which includes the technical functionality of related sites that function properly according to system requirements and what is needed;
- 4) Privacy is one dimension of electronic service quality which includes guarantees and the company's ability to maintain the security and integrity of data from customers who have used the application.

### Mobile Application

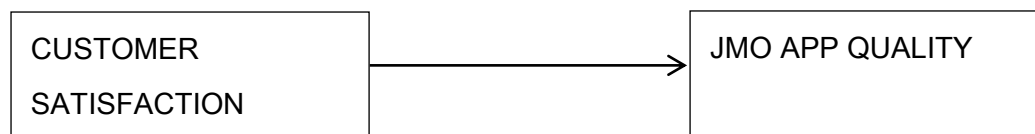
Mobile application is an application that allows for mobility by using equipment such as PDAs, cell phones or mobile phones. By using a mobile application, you can easily carry out various activities ranging from entertainment, selling, studying, doing office work, browsing and so on.

### Research Hypothesis

H0: Consumers are not satisfied with the service quality of Jamsostek Mobile

H1: Consumers are satisfied with the service quality of the Jamsostek Mobile application

### Hypothesis Overview



### Research methods

#### A. Research design

The design chosen in this study is a design that uses a quantitative research approach. The basis of quantitative research is a theoretical framework, both from the ideas of experts and the assumptions of the researchers themselves, which then develop into a problem whose data will be tested to obtain accepted and rejected results in the form of field research data, Ahmad Tanzeh (2009). The purpose of this quantitative research is to prove the relationship between variables, test theories, present descriptive statistical data, make estimates and forecast the research results.

This type of explanatory research was chosen to be used in this study. Explanatory research is research with the aim of making a correlation analysis between variables, as well as proving the hypotheses that have been formed (Sugiyono, 2015).

#### B. Population and Sample

##### 1. Population

The selected population is company participants registered with BPJS Employment through the Jamsostek Mobile application

##### 2. Sample

The selected sample is a portion of the Jamsostek Mobile application users from the entire population because this number is considered to represent the votes of the entire population.

C. Variable Measurement

1. Operational Definition

**Table 1. Operational Definiton**

Variable	Definition	Size
Customer satisfaction	Satisfaction is defined as a customer's feeling of being satisfied or disappointed resulting from comparing a product's perceived performance (or outcome) with the customer's expectations. (Kotler & Keller: 2009)	Likert scale
E-Service Quality	E-service Quality is defined as the extension of a site's ability to facilitate shopping, purchasing and distribution activities effectively and efficiently (Chase, et al., 2006).	Likert scale

2. Validity and Reliability Test

Validity test is used to prove that the data is valid. This means that the question is valid to be used to test research data. The instrument is valid if the results of  $r_{count} > r_{table}$ . (Ghozali, 2011:52). Reliability is a tool that if it is used several times to measure the same object, the same data will be produced (Sugiyono, 2007:174).

3. Classic assumption test

The classic assumption test used in this study consists of a normality test, multicollinearity test, and heteroscedasticity test. This test was carried out to fulfill the requirements of linear regression analysis, the goal is to determine the quality of the data so that the validity of the data can be known and avoid biased data estimation.

4. Analysis Tools

a. Linear Regression Analysis

This analysis is used to determine the relationship between two variables. In addition, with linear regression, a forecast can be made for each X and Y value. Mathematically, the depiction of a multiple linear regression model is as follows:

$$Y = A + BX + e$$

Y = dependent variable

B = regression coefficient or slope

A = intercept/constant

e = error or residual

b. Determination Test

The results of the determination test are useful for knowing the magnitude of the independent variable's influence on the dependent variable. The coefficient of determination is determined based on the adjusted R square value.

c. T test and F test

The t test is useful to see the effect of the partial significance of a variable. It is concluded that it is significant if the t count is more than t table or determined through significance below the significant level of 0.05. While the F test was conducted to determine the significance of the independent variables on purchasing decisions as the dependent variable simultaneously or simultaneously. It is concluded that it is significant if it has a calculated f value > f table, or seen from a significance value below the significant level of 0.05.

5. Data collection technique

1. Primary data

The data was obtained from filling out a questionnaire by company respondents registered with the Klaten Region Employment BPJS

2. Secondary Data

Data were obtained from pre-existing sources such as research journals, manuals and websites that provide certain information. This data is used as a research reference so that the data owned is more valid in the future

6. Measurement Method

To obtain an evaluation value of the role of CRM on service quality and an evaluation value of customer satisfaction on service quality, a measurement method is needed to test all assessments made by respondents whether the results are good or not. Calculation of the value of the results of a questionnaire or questionnaire using a Likert Scale. The Likert scale measures a person's perception or opinion about a condition.

## Results and Discussion

### Descriptive Statistical Analysis

This study obtained 155 questionnaire respondents. Of the 150 questionnaires processed, 108 respondents were male, and 47 respondents were female. Based on the use of Jamsostek Mobile services, at most 1 time a month for 111 respondents, 2-3 times a month for 31 respondents, more than 3 times a month for 15 respondents. Based on the introduction of the JMO application, most respondents were from Employment Agencies 103 respondents, Internet 21 respondents, Friends 20 respondents and Social Media 11 respondents.

### Validity and Reliability Test

**Table 2. Validity**

E-Service Quality Questionnaire	validity	Information
Item 1	0.858	Valid
Item 2	0.925	Valid
Item 3	0.939	Valid
Item 4	0.910	Valid
Item 5	0.877	Valid
Item 6	0.895	Valid
Customer Satisfaction	validity	Information
Item 1	0.700	Valid

Item 2	0.682	Valid
Item 3	0.800	Valid
Item 4	0.763	Valid
Item 5	0.712	Valid
Item 6	0.731	Valid
Item 7	0.760	Valid
Item 8	0.815	Valid
Item 9	0.706	Valid

The scale validity test in this study was carried out to test the validity of the measuring instrument using SPSS 22 software. These results show that the instrument meets the validity requirements and testing can be continued.

**Table 3. Cronbach's Alpha Coefficients of the Variables (Research Findings)**

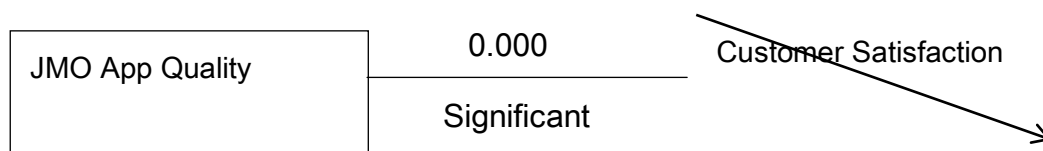
JMO App Quality	Reliability	Information
Item 1	0.951	Reliable
Item 2	0.940	Reliable
Item 3	0.937	Reliable
Item 4	0.943	Reliable
Item 5	0.947	Reliable
Item 6	0.944	Reliable
Customer satisfaction	Reliability	Information
Item 1	0.887	Reliable
Item 2	0.888	Reliable
Item 3	0.878	Reliable
Item 4	0.881	Reliable
Item 5	0.890	Reliable
Item 6	0.884	Reliable
Item 7	0.882	Reliable
Item 8	0.876	Reliable
Item 9	0.887	Reliable

Reliability test on This study is based on items that have been proven using Cronbach's Alpha analysis. The reliability test results in this study were obtained using SPSS 22 software. Based on the reliability test on the service quality scale, it is reliable, the reliability results can be trusted to be used as a measuring tool because it is  $\geq 0.700$ . While the results of

the reliability test on the satisfaction scale are reliable, the reliability results can be trusted to be used as a measuring tool because they are  $\geq 0.700$ .

### Hypothesis Testing

Hypothesis testing is carried out to determine whether to reject or accept the truth of the assumption statements that have been made. In this study, the hypothesis test used was multiple linear regression analysis. Multiple linear regression analysis aims to predict the relationship between the independent variable and the dependent variable to increase or decrease, and to determine the direction of the relationship between the independent variable and the dependent variable whether each independent variable has a positive or negative effect. This test is used because in this study using more than one independent variable.



Patient satisfaction is very fundamental in determining the quality of service from a hospital. Patient satisfaction has a very important role in assessing the quality of health services, because based on patient satisfaction with the quality of service at the hospital it will affect the assessment of service quality and create a positive image for the hospital (Ida, 2014). Meanwhile patient satisfaction is the main indicator of the standard of a health facility and is a measure of service quality (Elsa, 2013).

Satisfaction is found when one's expectations match the perceived performance of the product/service (Syukri), (Eboli & Mazulla, 2009). Loyalty is obtained when a customer repurchases a service/product or recommends it to a potential new customer (Allen, L, Forciniti, & et al, 2019). Customer satisfaction has a direct positive correlation with loyalty (Allen, L, Forciniti, & et al, 2019). Satisfied customers are loyal customers.

The results obtained by Employment BPJS have data on the level of customer satisfaction on the service quality of the Jamsostek Mobile application, which is expected to be one of the evaluation points to make the JMO application even better. Customers feel satisfaction in using the services of the Jamsostek Mobile application, so that through this satisfaction they will develop loyalty to the JMO application.

**Table 4. Coefficients**

**Coefficientsa**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Betas		
1 (Constant)	4,508	1617		2,788	.006
JMO App Quality	1,268	.063	.851	20018	.000

a. Dependent Variable: Customer satisfaction

### Conclusions and Recommendations

This research has examined the quality of mobile Jamsostek applications on customer satisfaction. PConsumer evaluation of goods and services in terms of assessing whether the product or service has met consumer needs and expectations. Along with technological developments, BPJS Ketenagakerjaan continues to innovate to improve customer experience & satisfaction. There are more and more mobile Jamsostek users due to increasing technological developments, making it easier for employees to make payments via smartphones. This research was conducted on company participants registered with BPJS Employment through the Jamsostek Mobile application. The results of our research show that the quality of the Jamsostek mobile application can increase customer satisfaction.

This research can provide a theoretical foundation and strong results, but still has limitations on the scope of the sample, the research was only conducted on company participants registered with BPJS Employment through the Jamsostek Mobile application. However, these findings can provide information and can be used as a reference for future researchers who are interested in discussing the development of mobile Jamsostek applications. The advice we can give is to increase the number of samples and not only focus on company participants, but can focus on other mobile jamsostek users. Future research can also develop this research model in other areas

## References

- Allen, J., L, E., Forciniti, C., & dkk. (2019). Th Role of Critical Incidents and Involvement in Transit Satisfaction and Loyalty. *Transport Policy*, 57-69.
- Churcill, G., & Suprenant, C. (1982). Penyelidikan Faktor Penentu Kepuasan. *Jurnal Riset Pemasaran*, 491-504.
- Eboli, L., & Mazulla, G. (2009). A New Customer Satisfaction Index for Evaluating Transit Service Quality. *Journal of Public Transportation*, 21-37.
- Gupron. (2020). ANALISIS KEPUASAN KONSUMEN MELALUI E-SERVICE QUALITY TERHADAP KEPUTUSAN PEMBELIAN DARING DI APLIKASI BUKALAPAN.COM. *Jurnal Manajemen Pendidikan dan Ilmu Sosial*, 337-348.
- Justitia, A., Semiati, R., & Ayuvinda, N. (2019). Customer Satisfaction Analysis of Online Taxi Mobile. *Journal of Information Systems Engineering and Business Intelligence*, 85-92.
- Kahar, A., Wardi, Y., & Patrisia, D. (2018). The Influence of Perceived Usefulness, Perceived Ease of Use, and Perceived Security on Repurchase Intention at Tokopedia.comn. *Atlantis Press*, 429-438.
- Sahrul, Hidayatullah, S. A., & Hadisaputro, E. L. (2019). Analisis Kepuasan Pelanggan Terhadap Kualitas Layanan Aplikasi Gojek Dengan Metode PIECES Layanan Aplikasi Gojek Dengan Metode PIECES Layanan Aplikasi Gojek Dengan Metode PIECES Framework. *Jurnal Sistem Informasi*, 47-53.
- Saputra, Y. S., & Hati, S. W. (2017). ANALISIS KEPUASAN PELANGGAN TERHADAP KUALITAS LAYANAN OJEK ONLINE (WAKJEK) DI KOTA BATAM. *Journal of Applied Business Administration*, 96-121.
- Syukri, S. (n.d.). Penerapan Customer Satisfaction Index (CSI) dan Analisi Gap pada Kualitas Pelayanan Trans Jogja. *Jurnal Ilmiah Teknik Industri*, 103-111.
- Xu, C., Peak, D., & Prybutok, V. (2015). A customer value, satisfaction, and loyalty perspective of mobile. *Decision Support Systems*, 171-183.



## ATTACHMENT

### Research Questionnaire

#### A. Instructions for filling in the questionnaire

1. Fill in your data before filling out the questionnaire
2. Filling instructions

The following is a description of the alternative answer choices available, namely:

- a. SS : Strongly Agree (5)
- b. S : Agree (4)
- c. KS : Disagree (3)
- d. TS : Disagree (2)
- e. STS : Strongly Disagree (1)

#### B. Respondent Data

Name :

Work :

- a. Non Asn Employees
- b. Private employees
- c. Self-employed
- d. Independent Worker
- e. Others (Specify)

Age :

- <25 Years
- 25-30 Years
- >30 Years

Gender

- ☐ Man
- ☐ Woman

### SCREENING QUESTIONS

How many times a month do you use the Jamsostek Mobile service?

- ☐ 1 time
- ☐ 2-3 Times
- ☐ > 3 Times

Where did you get to know the JMO application?

- ☐ Friend
- ☐ Internet
- ☐ Social Media
- ☐ You
- ☐ Other

When was the first time you used the JMO application?

Indicators of Service Quality Questions (E-Service Quality)

No	Question Indicator	SS	S	N	TS	STS
1.	I can access the JMO application easily					
2.	The information I need is very easy to find (products, services, fees, to payment methods)					
3.	JMO application has fast loading times					
4.	<i>log in</i> and logging out on the JMO application is easy and fast					
5.	Services on JMO applications rarely experience errors					
6.	The JMO app guards my personal data					
7.	I feel safe when using the JMO application					
8.	BPJS Ketenagakerjaan responds quickly if there are complaints about using the JMO application					
9.	JMO provides a contact that can be contacted in the event of a complaint					
Customer Satisfaction Question Indicator						
1.	I am satisfied with the quality of service on the JMO application					
2.	I feel that it is easier for me to use BPJS Employment services after using the JMO application					
3.	The JMO application provides services that are more effective, efficient and transparent					
4.	The JMO application is the best way for people with mobility difficulties					
5.	The JMO application reduces queue density at the BPJS Employment office					
6.	I want to continue using the JMO application as a means of using BPJS Employment services					