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The Influence of Application System Quality and Information Quality on the Satisfaction of JMO BPJS Ketenagakerjaan User Participants (Study on BPJS Ketenagakerjaan Participants at BPJS Ketenagakerjaan Situbondo Branch)

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ABSTRACT

This study aims (1) to determine the effect of application system quality, information quality, and consumer trust partially influence participant satisfaction (2) to determine the effect of application system quality, information quality, and consumer trust simultaneously influence participant satisfaction (3) to find out between the quality of the application system, information quality, and consumer trust which has the most dominant influence on participant satisfaction. The method used is quantitative. The result of this research is multiple linear regression equation Y = 1.407E-16 + 0.183 X1 + 0.265 X2 + 0.432 X3 + e. Partially the Quality of the Application System shows the tcount value is greater than ttable (2.619) > (1.976) or sig α 0.010 <0.05, The Information Quality variable shows a tcount value that is greater than ttable (3. 562) > (1.976) or sig α 0.000 <0.05, and the Consumer Confidence Variable shows a tcount value that is greater than ttable (6.265) > (1.976) or sig α 0.000 <0.05. Simultaneously the F test obtained an Fcount value of 60,487 a value greater than Ftable, namely 2.67 or Fcount 60,487 > Ftable 2.67 with a probability of 0.000. The application system quality variable is 2,619, the information quality variable is 3,562, and consumer trust is 6,265. So these results indicate that the most dominant variable is the variable X3 Consumer confidence. R2 shows the magnitude of R2 is 0.554, this means that 55.4% of the participant satisfaction variable can be explained from the three variables Quality of Application Systems, Information Quality, and Consumer Trust. While the rest (100% -55.4% = 44.

Keywords : Application system quality, Information quality, Consumer trust, and Participant satisfaction.

1. INTRODUCTION

The implementation of social security programs is one of the responsibilities and obligations of the State to provide socio-economic protection to the community. In accordance with the condition of the state's financial capacity. Indonesia, like other developing countries, develops social security programs based on funded social security, namely social security funded by participants and still limited to working people in the formal sector. This is a quote written on the BPJS Ketenagakerjaan website. The application of an application system within a company is faced with two things, whether the company gets successful application system implementation or application system failure (Montazemi in Istianingsih, 2009).

In its application, to obtain good quality information, a good application system is also needed so that data can be processed into useful information. With a good application it is hoped that user satisfaction will be fulfilled. The JMO application is an application that makes it easy to do online, which can be downloaded on Android and iOS. The use in this application is to carry out JHT simulations, check JHT balances, check details of JHT contributions and pension benefits, and submit JHT claims. There are many features in the application.

There are several phenomena that occur related to the satisfaction of BPJS Ketenagakerjaan participants. BPJS Ketenagakerjaan participants when entering the beginning of the Covid 19 Pandemic experienced difficulties in servicing Old Age Security (JHT) claims, as well as checking Old Age Security (JHT) Balances, Information on Non-Active Ketenagakerjaan BPJS Membership and information related to BPJS Ketenagakerjaan. The main purpose of the JMO application is to make it easier for BPJS participants without having to come to the branch office, get stuck in traffic jams, heat, rain and queues. Through the development of this JMO application. I hope that BPJS Ketenagakerjaan participants at the Situbondo branch no longer need to queue at the office, especially in the midst of the Covid-19 pandemic as a form of prevention of the corona virus.

Based on these problems that user satisfaction is influenced by application systems and information quality. Dreheeb and Fabil (2018) found that the e-learning application system can satisfy users from the point of view of using the e-learning system. Nirwanto and Andarwati (2018) found that information application system user satisfaction found

system quality, information quality, and top management support proven to influence the designated SMEs to feel its usefulness.

Istianingsih and Utami (2009) state that a computerized accounting information application system allows users of financial reports to view financial reports at any time more quickly and accurately so that service quality, application system quality, and information quality have a significant effect on user satisfaction. Wahyudi et al (2013) was developed by information application system experts to measure user satisfaction of information application systems by assessing the desired characteristics of an application system (application system quality), the desired characteristics of the application system output (information quality) and the quality of support received application system users from the information application systems department and information support personnel (quality of service).

Formulation of Research Problems

1. How does the quality of the application system partially affect the satisfaction of participants using the JMO BPJS Ketenagakerjaan application?
2. How does the quality of information partially affect the satisfaction of participants using the JMO BPJS Ketenagakerjaan application?
3. How do the quality of the application system and the quality of the information affect the satisfaction of participants using the JMO BPJS Ketenagakerjaan application?
4. Which variable is the most dominant in terms of the quality of application systems and information systems on the satisfaction of JMO BPJS Ketenagakerjaan Application User Participants?

2. LITERATURE REVIEW

Theory of Reasoned Action (TRA)

Theory of Reasoned Action (TRA)or the joint action theory developed by Ajen and Fishbein (1980) (Jogiyanto, 2007). This theory arose due to the lack of success of research testing attitude theory, namely the relationship between attitudes and behavior. The results of the research that tested this attitude theory were unsatisfactory because there were many results of a weak relationship between attitude measurements and the performance of the desired voluntary behavior (Jogiyanto, 2007).

Theory of Planned Behavior (TPB)

Theory of Planned Behavior (TPB)is the development of TRA. Icek Ajzen developed a construct that did not yet exist in TRA. The construct is perceived behavioral control (perceived behavioral control). This construct is used to control the deficiencies and limitations of the lack of resources used to perform behavior. The basic assumption of TPB is that many behaviors are not fully under individual control, so additional concepts of perceived behavioral control are needed (Jogiyanto, 2007).

Technology Acceptance Model (TAM 3)

TAM is individual behavior in accepting information technology (Davis et al, 1993) in Alomary and Woollar (2015). Based on the TAM theory, a complete network of individual determinants of information technology adoption has been presented. TAM is a theory that relates to individual attitudes and behavior in carrying out activities or reasonable actions in the context of IT usage. Someone will take advantage of computers or IT on the grounds that these technologies will produce benefits for him.

Information Application System Quality

Quality of Information Application Systems The success model put forward by William H. DeLone and Ephraim R. McLean in 2003, in their research entitled: The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. In this updated model, they change several dimensions, the success of information application systems from the previous model (1992) to become: Information Quality, System Quality, Service Quality, User Satisfaction, Intention to Use (Usage) and Net Benefits.

Application System Quality

Mascove and Simkin (1994, in Komara, 2005) define an application system, namely a set of parts that are interconnected and together achieve a specific and objective application system, an application system must have linkages, integration and objective centers within the organization. Chusing in Susanto (2004) defines an application system as an entity consisting of two or more components that are interconnected and interact to achieve a goal. The basic idea of quality is not to meet a number of criteria set by the company/agency, instead quality is to meet the criteria set by the customer (Raymond, 2007).

Information Quality

Information quality is the degree to which information has the characteristics, content, form and time to provide it for certain end users (O'Briens, 2005: 703). An application system from the use of IT must be able to provide information to support decision making within a company/organization. Communication technology means all information technology that supports all communication technology. According to McLeod in Jacob (2012), information is data that is processed into a form that is more useful to the recipient.

Online Consumer Trust (E-Trust)

Consumer trust becomes very important in online/online-based transactions. The existence of consumer trust is certainly very beneficial for the next response, namely the purchase. according to Ujang Sumarwan (2011: 165-166) trust is a consumer's knowledge about an object, its attributes and benefits. Based on this understanding, knowledge is the most important factor in forming consumer trust, in e-commerce transactions the role of the e-commerce platform is very important in providing understanding and forming trust through several advertisements in several media.

Conceptual Framework

Hypothesis

1. The quality of the application system partially has a positive and significant effect on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application.
2. Quality of information Partially has a positive and significant effect on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application.
3. Consumer Trust Partially has a positive and significant effect on the satisfaction of BPJS Ketenagakerjaan participating companies using the JMO application.
4. Application system quality, information quality, and consumer trust simultaneously have a positive and significant effect on the satisfaction of BPJS Ketenagakerjaan participating companies using the JMO application.
5. Consumer Trust has the most dominant influence on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application.

3. METHOD

Population

According to Sugiyono (2013: 61) argues that, "Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics that are applied by researchers to study and then conclusions are drawn." According to Ferdinand (2011: 215), population is a combination of all the elements that make up events, things or people that form similar characteristics which are the center of attention of researchers because it is seen as a universe of research.

Sample

According to Sugiyono (2012: 116), the sample is part of the number and characteristics possessed by the population. Determining the number of representative samples according to (Hair, 2009) depends on the number of indicators multiplied by 5 to 10. The number of samples in this study are:

Sample = number of indicators x 10

= 15 x 10

= 150 respondents

Types of research

Primary data and secondary data are sources of information data collected to form the basis of conclusions from a study. Even though in essence the understanding of both of them is a source of data, the way to obtain it is different. Primary data is collected directly by researchers for the first time through effort and direct experience in the field, while secondary data is data that has been collected or produced by agencies/institutions/other people.

Operational Definition of Research Variables

No Variable

Study Variable Definitions Dimensions/Indicators Source

1. Application System Quality (X1) System quality can be measured through five dimensions, including: 1.Response Time

(SpeedAccess) 2.Reliability

(Application System Reliability)

3. Flexibility(Flexibility)

4. security(Security) Elson et al.

(2005:206)

2 Information System Quality (X2) Information quality is measured by indicators, namely: 1. Accurate

2. Just in time

3. Relevant

Jogiyanto (2005:10)

3 Consumer Confidence (X3) Consumer trust is the company's willingness to rely on business partners 1. Online seller competence;

2. Online seller integrity;

3. Honesty in serving;

4. Kindness in meeting consumer needs Mayer et al., (1995) and Gefen (2004), and Andreas Auingner et al., (2016)

4 Participant Satisfactin (Y) Emphasizes user satisfaction end Regarding the technological aspect, by assessingcontent,accuracy, format, timing And

Ease of use of System 1. Completeness Fill(Contents)

2. Accuracy

3. Form (Format)

4. Easy of Use(Ease of Use) Doll &Torkzadeh

4. RESULT AND DISCUSSION

4.1 RESULT

Validity test

No	Indicator	r Count	r Table	Information
1	X1.1	0.757	0.25	VALID
2	X1.2	0.761	0.25	VALID
3	X1.3	0.523	0.25	VALID
4	X1.4	0.783	0.25	VALID
5	X2.1	0.835	0.25	VALID
6	X2.2	0.836	0.25	VALID
7	X2.3	0.758	0.25	VALID
8	X3.1	0.837	0.25	VALID

No	Indicator	r Count	r Table	Information
9	X3.2	0.827	0.25	VALID
10	X3.3	0.413	0.25	VALID
11	X3.4	0.561	0.25	VALID
12	Y1.1	0.721	0.25	VALID
13	Y1.2	0.574	0.25	VALID
14	Y1.3	0.668	0.25	VALID
15	Y1.4	0.693	0.25	VALID

From the table above it can be seen that the validity coefficient value of each question item is greater than r table > 0.25, which means that each variable item is valid, so it can be

concluded that these items can be used to measure the variable Quality of Application Systems, System Quality Information, And Consumer Confidence.

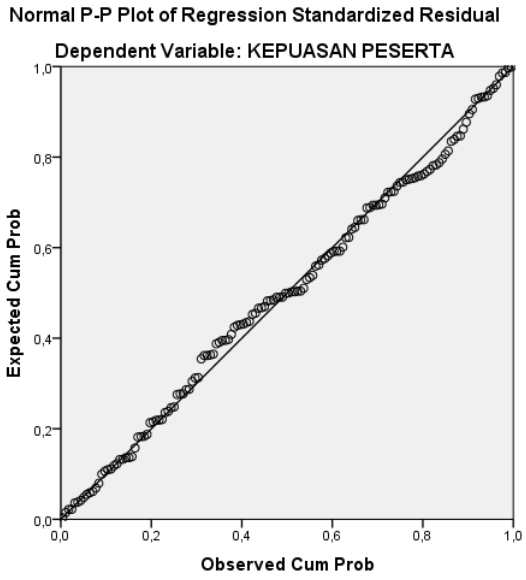
Reliability Test

Variable	Cronbach's Alpha	α	Information
Application System Quality	0.83	0.60	Reliable
Information Quality	0.88	0.60	Reliable
Consumer Trust	0.80	0.60	Reliable
Participant Satisfaction	0.79	0.60	Reliable

From the table above it can be seen that the reliability test is to test from a measuring instrument for each variable. Shows that all variables have a Cronbach's Alpha coefficient that is greater than 0.60. Thus it can be concluded that all measuring concepts for each variable are reliable.

Classic assumption test

Normality test



The normal graph plot shows that the dots spread around the diagonal line, and the distribution follows the direction of the diagonal line. These two graphs show that the regression model is feasible to use because it assumes normality.

Statistical Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residuals
N		150
Normal Parameters, b	Means	,0000000
	std. Deviation	,66772481
Most Extreme Differences	absolute	.050
	Positive	.050
	Negative	-.047
Test Statistics		.050
asymp. Sig. (2-tailed)		,200c,d

The table above explains that the results of the normality test statistically have a Statistical Test value of 0.050, so it can be concluded that the residuals are normally distributed.

Multicollinearity Test

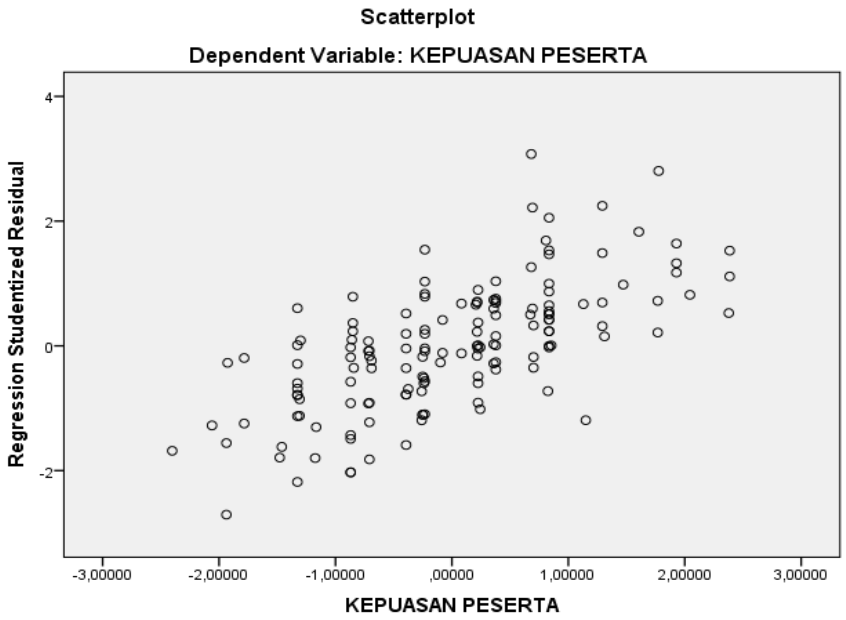
Coefficientsa

Model		Collinearity Statistics	
		tolerance	VIF
1	(Constant)		
	Application System Quality	,624	1,602
	Information Quality	,551	1,816
	Consumer Trust	,642	1,557

The tolerance value is close to 1 in the variable Application System Quality, Information Quality And Consumer Trusteach of which has a value of 0.624, 0.551, and 0.642 with a VIF <10 for each variable, namely 1.602, 1.816, and 1.557, indicating high collinearity.

Heteroscedasticity Test

Heteroscedasticity test by means of scatterplot



Based on the results of the heteroscedasticity test using the Scatterplot, the results of the data analysis above show that there is no heteroscedasticity violation because the points spread or do not overlap one another.

Heteroscedasticity Test by means of Statistics

correlations

			Application System Quality	Information Quality	Consumer Trust	Unstandardized Residuals
Spearman's rho	Application System Quality	Correlation Coefficient	1,000	,591**	,495**	,013
		Sig. (2-tailed)	.	,000	,000	,875
		N	150	150	150	150
	Information Quality	Correlation Coefficient	,591**	1,000	,547**	.053
		Sig. (2-tailed)	,000	.	,000	,519
		N	150	150	150	150
	Consumer Trust	Correlation Coefficient	,495**	,547**	1,000	,000
		Sig. (2-tailed)	,000	,000	.	,996
		N	150	150	150	150
	Unstandardized Residuals	Correlation Coefficient	,013	.053	,000	1,000
		Sig. (2-tailed)	,875	,519	,996	.
		N	150	150	150	150

Sig. Value (2-tailed) on the Unstandardized Residual above of 0.875 (forApplication System Quality/X1) 0.519 (forInformation Quality/X2), and 0.996 (forConsumer Trust/X3) which means that the value is above 0.05 (cutt-off), meaning that the data does not violate the classical assumption of heteroscedasticity.

Multiple Linear Regression Analysis

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	1.407E-16	.055		,000	1,000
	Application System Quality	, 183	,070	, 183	2,619	,010
	Information Quality	,265	,074	,265	3,562	,000
	Consumer Trust	,432	,069	,432	6,265	,000

Based on the above results, the results of the multiple linear regression equation are: Y = 1.407E-16 + 0.183 X1 + 0.265 X2 + 0.432 X3 + e

The results of the linear regression equation above show that:

a. The constant value of the equation above is = 1.407E-16, this figure indicates that if X1 (Application System Quality), X2 (Information Quality) and X3 (Consumer Trust) are constant or X = 0, then the achievement is 1.407.

b. X1 (Application System Quality) shows a coefficient value of (0.183). This means that if there is an increase in the Application System Quality factor of 1% for the company, participant satisfaction will also increase by the multiplier variable 0.183 assuming the other independent variables are considered constant. The quality of the application system affects participant satisfaction because the value of X1 is smaller than Y or a constant, namely 0.183 <1.407.

c. X2 (Information Quality) shows a coefficient value of (0.265). This means that if there is an increase in the Information Quality factor of 1% for the company, participant satisfaction will also increase by the multiplier variable 0.265 assuming the other independent variables are considered constant. Information quality affects participant satisfaction because the value of X2 is smaller than Y or a constant, namely 0.265 <1.407.

d. X3 (Consumer Confidence) shows a coefficient value of (0.432). This means that if there is an increase in the Consumer Trust factor of 1% for the company, the satisfaction of the participants will also increase by the multiplier variable 0.432 assuming the other independent variables are considered constant. Consumer trust affects participant satisfaction because the value of X3 is smaller than Y or a constant, namely 0.432 <1.407.

Hypothesis Test

Coefficient of Determination (R2)

The results of the R2 test show that the magnitude of R2 is 0.554, this means that 55.4% of the participant satisfaction variable can be explained from the three variables of Application System Quality, Information Quality, and Consumer Trust. While the rest (100% -55.4% = 44.6%) is explained by other causes outside the model.

Partial Test (t test)

1. The Variable Quality of the Application System shows a tcount value greater than ttable (2.619) > (1.976) or sig α 0.010 <0.05, then Ho is rejected and Ha is accepted meaning that the Variable Quality of the Application System has a positive and significant effect on participant satisfaction.
2. The Variable Information Quality shows that tcount is greater than ttable (3.562) > (1.976) or sig α 0.000 <0.05, then Ho is rejected and Ha is accepted, meaning that the Information Quality variable has a positive and significant effect on participant satisfaction.
3. The Consumer Trust variable shows a tcount value greater than ttable (6.265) > (1.976) or sig α 0.000 <0.05, then Ho is rejected and Ha is accepted meaning that the Consumer Trust variable has a positive and significant effect on participant satisfaction.

Simultaneous Test (Test F)

From the ANOVA test or F test, the Fcount value is 60.487, a value greater than Ftable, which is 2.67 or Fcount 60.487 > Ftable 2.67 with a probability of 0.000. Because the probability value is much smaller than 0.05, the regression model can be used to predict participant satisfaction or it can be said that the quality of the application system, information quality, and consumer trust jointly affect participant satisfaction, then Ho is rejected and Ha is accepted.

4.2 DISCUSSION

Based on the results of the t test, the quality of the application system shows that the value of tcount is greater than ttable (2.619) > (1.976) or sig α 0.010 <0.05, then Ho is rejected and Ha is accepted, which means that the variable quality of the application system has a positive and significant effect on participant satisfaction. This shows that the existence of a good and high-quality application system helps customers receive all information about the company's programs.

Based on the results of the t test, the quality of information shows that the value of tcount is greater than ttable (3.562) > (1.976) or sig α 0.000 <0.05, then Ho is rejected and Ha is accepted, which means that the variable Information Quality has a positive and significant effect on participant satisfaction. This shows that all the information provided through the application that has been provided by the company is of good quality, making it easier to receive existing information according to customer needs.

Based on the results of the t test, Consumer Trust shows a tcount value greater than ttable (6.265) > (1.976) or sig α 0.000 <0.05, then Ho is rejected and Ha is accepted, which means that the Consumer Trust variable has a positive and significant effect on participant satisfaction. This shows that consumers already trust all the information provided and it is really needed by consumers with consumer trust in the company guaranteed.

From the ANOVA test or F test, the Fcount value is 60.487, a value greater than Ftable, which is 2.67 or Fcount 60.487 > Ftable 2.67 with a probability of 0.000. Because the probability value is much smaller than 0.05, the regression model can be used to predict participant satisfaction or it can be said that the quality of the application system, information quality, and consumer trust jointly affect participant satisfaction, then Ho is rejected and Ha is accepted.

Based on the results of the study, it showed that the value of the application system quality variable was 2.619, the information quality variable was 3.562, and consumer trust was 6.265. So these results indicate that the most dominant variable is the variable X3 Consumer confidence

5. CONCLUSION

1. The quality of the application system partially has a positive and significant effect on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application which is acceptable.
2. Quality of information Partially has a positive and significant effect on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application which is acceptable.
3. Consumer Trust Partially has a positive and significant effect on the satisfaction of BPJS Ketenagakerjaan participating companies using the JMO application which is acceptable.

4. The quality of the application system, information quality, and consumer trust simultaneously have a positive and significant effect on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application.
5. Consumer Trust has the most dominant influence on the satisfaction of the companies participating in the Ketenagakerjaan BPJS using the JMO application.

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