

THE INFLUENCE OF INFORMATION TECHNOLOGY AND SERVICE QUALITY ON USER SATISFACTION OF JKN MOBILE APPLICATION: CASE STUDY AT WADAS KARAWANG PUBLIC HEALTH CENTER

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Abstract

This consider points to test the impact of data innovation technology and service quality on JKN Mobile application users. JKN mobile is an application developed by BPJS Kesehatan to provide services and information related to the National Health Insurance (JKN) program that can be accessed anywhere and its many features make it easier for users to find out their data. This study was conducted at the Wadas Karawang Health Center. The data was obtained after distributing questionnaires to 50 respondents at the health center using the purposive sampling method, with the SPSS testing tool. The results of the think about appeared of service to the satisfaction of JKN mobile users was very good and the service from the health center was good. User satisfaction is a benchmark for a service in a company or agency, there is still dissatisfaction with some users because the features are very many, and service quality is based on user satisfaction.

Keywords: *Information Technology, Service Quality, User Satisfaction, JKN Mobile*

Introduction

The fast advancement of data and communication innovation has brought critical changes to the arrange of human life, both in social, cultural, economic, political, and health aspects that also affect all age groups and levels of society. A person is required to have the ability to adapt, be sensitive, and have skills in mastering information and communication technology to respond to the dynamics of changes in the times. The implementation of information and communication technology also plays a role in the implementation of government to achieve optimal business and organizational processes, especially in the context of providing public services to the community. The Electronic-Based Government System (SPBE) is the implementation of a government system by utilizing information and communication technology to provide SPBE services. The existence of information and communication technology in government activities can encourage the effectiveness and efficiency of public services. Digital-based public services are a demand that needs to be managed to reduce the possibility of obstacles.

The Karawang Branch of the Social Security Administering Agency (BPJS) Health is an agency that implements an electronic-based government system to support social health insurance for the people of Karawang Regency. The Social Security Administering Agency hereinafter abbreviated as BPJS is a public legal entity established to organize a social security program consisting of two agencies. First, BPJS Health through the National Health Insurance (JKN) program. Second, BPJS Employment with the Work Accident Insurance (JKK), Old Age Insurance (JHT), Death Insurance (JKM), and Pension Insurance (JP) programs (Law of the Republic of Indonesia Number 24 of 2011 concerning the Social Security Administering Agency, 2011).

Tjiptono (2017) characterizes client fulfillment as "An passionate reaction to the assessment of the involvement of expending a item or benefit". As a reaction to the involvement felt by clients after devouring a item or benefit. "Client fulfillment markers concurring to Tjiptono (2017) there's a feeling of fulfillment (within the sense of being fulfilled with the item or benefit) which is communicated by sentiments of fulfillment or disappointment of clients when getting great benefit from quality items or administrations from a company. Fulfillment of client desires after acquiring a item, to be specific whether or not the quality of a item or service after purchasing a product or getting a service according to the customer's wishes. Information technology is a science that includes communication technology to process, store, and send information via fast communication channels (Rachmadi, 2020).

JKN is a government program that aims to provide health insurance for the people of Indonesia. This program is organized by the Health Social Security Administering Agency (BPJS) and has been running since January 1, 2014. Based on data submitted by the Head of the Karawang Health Office, 96.61% or 2,424,663 Karawang residents are registered as National Health Insurance (JKN) participants. This makes Karawang Regency successful in achieving the Universal Health Coverage (UHC) predicate

for the JKN-KIS program. In October 2024, the Wadas Karawang Health Center registered 18,616 BPJS participants, which experienced an increase and decrease every month, and the Wadas Health Center has undergone the UHC program.

Based on Wulandari's investigate (2019), it was expressed that the JKN Versatile application was great when seen from the time required when giving administrations, but the execution of the JKN Portable application had not come to the required target (Wulandari, 2019). Within the inquire about of Sari, Hartini & Andria (2019), it was expressed that one of the components for the moo utilize of the JKN Portable application at the Karawang Rule Wellbeing Department Office was that members were hesitant to utilize the application (Sari et al., 2019). The implementation of BPJS Kesehatan to adapt to technological developments is realized by the presence of a non-face-to-face service channel for the National Health Insurance Mobile application (Mobile JKN). Reflecting on the statement of the President Director of BPJS Kesehatan, namely Ghufon Mukti, he explained that the existence of this digital service which was inaugurated in 2017 has had an extraordinary impact, people can wait at home and download it via the Playstore for Android users or the Appstore for iOS users on smartphones and then can access various features in it (Sigit, 2022). This application is also an innovative product and online service managed by BPJS Kesehatan to make it easier for prospective participants and JKN-KIS participants to obtain information and administrative services for the National Health Insurance (JKN).

From previous research, it was found that the implementation of JKN mobile in the Karawang area was still low because its features were very numerous, and at the Wadas Health Center, the community or patients were mostly elderly and did not use electronic devices such as cellphones and other communications, there were still complaints from mobile JKN users that there were often trouble or maintenance which resulted in users also having to queue using manual queues. The researcher's initial observation regarding the population of Karawang Regency in 2022 was 913,448 people (Central Statistics Agency of Karawang Regency, 2022). According to Debi Mersah Putra (interview on May 30, 2022) as Head of the Participant and Participant Services Division (KPP) of the Karawang Branch of BPJS Kesehatan, a total of 849,401 JKN-KIS participants in Karawang Regency from various segments, sadly only 101,676 participants downloaded and used the Mobile JKN application. He also explained that the low number of users could be caused by the lack of literacy skills of participants in reading the Mobile JKN application information media and also technical constraints such as inactive mobile phone numbers and e-mails when registering for a Mobile JKN application account.

Literature Review

1. Information Technology

Data innovation is everything related to the method, utilize as a device, control, and administration of data. Williams and Sawyer (2003) said that Information Innovation may be a innovation that's not as it were computer innovation that will be utilized to handle and store data but too incorporates communication innovation to send or spread data. On the off chance that associated with the JKN Versatile application framework with the advancement of innovation and data within the advanced period with markers of ease of utilize, speed of get to, framework adaptability, and framework security.

2. Service Quality

The victory of an data framework is seen from a few things counting how great the quality of the framework is, the data given, the level of utilize, client fulfillment, and other things that appear how much impact is gotten by the nearness of the data framework (Rahayu et al., 2018). The services obtained can be in the form of application updates, and reviews or responses from developers if there are problems with the application. Service quality can also be said to be the result of a comparison between service users' perceptions of the services they want and those they receive, covering all the supporting elements that cover it, such as comfort, empathy, and responsiveness in meeting consumer expectations. The dimensions of service quality are obtained from the dimensions proposed by Tjiptono & Chandra (2011), namely assurance, empathy, responsiveness, and physical evidence.

3. User Satisfaction

User Satisfaction User Satisfaction is the user's response to the use of information system output (Jogiyanto, 2007). The indicators used to measure user satisfaction are system satisfaction, information satisfaction, and service satisfaction. Several studies related to JKN Mobile user satisfaction in Indonesia indicate an increase in user satisfaction along with updates and improvements to application features. According to Widodo et al. (2020), most users are satisfied with the existence of the JKN Mobile

application which provides easy access to BPJS Kesehatan services, but there are still complaints about the lack of speed and technical problems in using the application. This study also shows the importance of training factors and user understanding in maximizing the use of the application.

Research Methods

The methodology of this study uses quantitative methods. Quantitative methods are scientific research methods that collect and analyze numerical data to answer research questions and test hypotheses. This study uses a survey methodology that involves direct sampling from the target population. This method was chosen because of its ease of application, thus accelerating the research process. The research sample consisted of 50 respondents to JKN Mobile users at the Wadas Karawanag Health Center. This study used a purposive sampling technique for sampling. Purposive sampling is a method used to select samples based on certain criteria or considerations, as explained by Sugiyono (2016). The purposive sampling technique is used in quantitative research or research that does not generalize as stated by Sugiyono (2016) with SPSS tools to test validation, reliability, normality, multicollinearity, multiple linear regression analysis, coefficient of determination, partial tests, and simultaneous tests.

Results and Discussion

Instrument Test

1. Validity Test

The legitimacy test appears the degree of exactness between the information that happens on the protest and the information collected by the analyst to discover the legitimacy of an thing by connecting the thing score with the full of the things.

Table 1. Results of Instrument Validity Test

Variable	Indicator	Significance	Description
Information Technology	X1. 1	0.0915	Valid
	X1. 2	0.0585	Valid
	X1. 3	0.0437	Valid
	X1. 4	0.0636	Valid
Service Quality	X2. 1	0.0503	Valid
	X2. 2	0.0491	Valid
	X2. 3	0.0670	Valid
	X2. 4	0.0780	Valid
	X2. 5	0.0546	Valid
	X2. 6	0.0501	Valid
User Satisfaction	Y. 1	0.0780	Valid
	Y. 2	0.0750	Valid
	Y. 3	0.0610	Valid
	Y. 4	0.0537	Valid

Based on Table 1, shows that the significance value is above 0.3, so it can be concluded that the instrument or statement items in each variable consisting of 50 statement items can be declared valid.

2. Reliability Test

Reliability test is the degree of precision, accuracy, or accuracy shown by the measurement instrument. A reliability test is conducted to determine how far the measurement results of the questionnaire are in repeated use.

Table 2. Results of Instrument Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.924	50

Based on Table 2, shows that the Cronbach Alpha value of $0.924 > 0.6$ means that all independent and dependent variables can be concluded as reliable.

3. Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is utilized to see the impact of a few autonomous factors on the subordinate variable and anticipate the free variable utilizing two or more subordinate factors.

Table 3. Multiple Linear Regression Test

Model	Unstandardized Coefficients	
	B	Std. Error
1 (Constant)	5.692	4.602
Information Technology	.454	.218
Service Quality	.137	.194

a. Dependent Variable: User Satisfaction

From the multiple linear regression test above, the following equation is obtained:

$$Y = a + b_1X_1 + b_2X_2 + e$$

$$Y = 5.692 + 0.454 X_1 + 0.218 X_2 + e$$

The equation model can be interpreted as follows:

- The calculation comes about that the steady incorporates a positive esteem of 5.692, at that point when the benefit quality and user fulfillment stay the same, client fulfillment incorporates a settled esteem of the steady esteem of 5.692.
- The calculation result that the information technology coefficient has a positive value of 0.454 if the value of the information technology variable increases, user satisfaction will also increase.
- The calculation result is that the service quality has a positive value of 0.137 if the value of the service quality variable increases, user satisfaction will also increase.

Hypothesis Test

1. Partial t-Test

The statistical t-test is conducted to determine the effect of an independent variable on the dependent variable. To find out the results of the t-test, you can compare the calculated t with the t-table or you can see the coefficient table on the significance value in the Sig column. The conclusion model that can be drawn from this test is as follows:

Table 4. t-Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8.284	4.932		1.680	.100
Information Technology	.203	.134	.200	1.511	.038
Service Quality	.603	.140	.571	4.314	.025

a. Dependent Variable: User Satisfaction

Based on Table 4 above, it shows that:

- The influence of information technology on user satisfaction
 - It is known that the Sig value of the information technology variable (X_1) on the user satisfaction variable (Y) is $0.038 < 0.05$, so it can be concluded that information technology partially has a significant effect on user satisfaction.

- The impact of benefit quality on Jkn Portable client fulfillment.

It is known that the Sig esteem of the benefit quality variable (X2) on the client fulfillment variable (Y) is 0.025

2. Simultaneous f test

The statistical f-test is carried out in order to determine the effect of all independent variables on the fixed variables used in the regression model study with testing at a significance level of 5%. To find out the significance value, you can see the ANOVA (analysis of variance) table on the significance value in the sig column.

**Table 5. F-Test
ANOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.618	2	2.309	2.589	.034 ^b
	Residual	24.082	27	.892		
	Total	28.700	29			

a. Dependent Variable: User Satisfaction

b. Predictors: (Constant), Information Technology, Service Quality

Based on Table 5 shows the Sig. Value $0.034 < 0.05$, so it can be concluded that information technology and service quality together have a significant effect on user satisfaction.

Discussion

1. The influence of information technology on JKN Mobile user satisfaction
Researchers found that with the development of information technology, the quality of service is increasingly advanced with many online applications making the quality of service easier to access and the efficiency of service is getting better and with technological advances, it has a great impact on the quality of service and is safer and the protection of personal data, socialization of service users about the quality of JKN mobile is easier to understand.
2. The influence of service quality on JKN Mobile user satisfaction
Researchers showed that customer satisfaction has a positive impact on service quality. This shows that customers are satisfied with their experience of quality service on JKN Mobile which is easy to understand and the features in it, researchers get satisfaction from service users and there are still some service users who may find it a little difficult to apply for JKN mobile because they do not have a cellphone or communication device so that health center officers direct them to register offline or go directly to the health center registration if they want to seek treatment.
3. The influence of information technology and service quality on JKN Mobile user satisfaction
Researchers found that if the quality is in accordance with or exceeds customer expectations, then satisfaction will be achieved which can increase customer loyalty and get a positive response, Therefore, companies or agencies must consistently maintain and improve their services to maintain high and constant customer satisfaction.

Conclusion and Suggestions

Conclusion

Inquire about conducted at the Wadas Karawang Wellbeing Center on the impact of data innovation and benefit quality on JKNJKN Mobile application user satisfaction shows that there are still some users who are confused about the features in the application and after an explanation was given to the service officers at the Wadas Health Center, the users understood. User satisfaction with service quality is very good.

Suggestions

From the research that has been conducted at the Wadas Karawang Health Center, several things can be done so that user satisfaction is maintained, namely:

- a. Provide one officer to help if there are service users who do not understand the features of JKN Mobile.
- b. Conduct training for officers to provide accurate and clear services or information to service users.

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