ANALYSIS OF JKN MOBILE USER SATISFACTION USING SERVQUAL METHOD AT PRIVATE HOSPITALS IN WEST BEKASI

Deasy Erika Kurniawaty[1]*, Lourdes Joanna Kusumadi[2], Allisa Laurina Barnavio[3], Innocentius Bernarto[4]

[1,2,3,4] *Faculty of Economics and Business, Universitas Pelita Harapan, Indonesia*

e-mail: 01615240105@student.uph.edu
*(Corresponding Author indicated by an asterisk *)*

ABSTRACT

As the national health insurance provider for all Indonesians, the Social Security Administering Body (BPJS) is working toward enhancing its service with JKN Mobile. It is anticipated that the JKN Mobile application will enable customers to obtain more user-friendly and effective services. The research uses a quantitative approach. The population in this study is 77. This study uses the purposive sampling method with certain criteria for a total of 65 samples. The instrument uses a questionnaire. Data analysis uses SERVQUAL. Data processing is using IBM SPSS version 25. The results on the collected data show Cronbach's Alpha value for perception of 0.823 and expectations of 0.782, greater than 0.60, meaning that the questionnaire of this study is reliable. The conclusion of the study conducted in Private Hospitals in West Bekasi shows that the menu and features of JKN Mobile are perceived as incomplete and, to some extent, are not functioning properly most of the time.

Keywords: Mobile JKN; SERVQUAL; Perceptions; Expectations

INTRODUCTION

According to Chapter VI, health insurance is a type of social security program that is based on Law Number 40 of 2004 regarding the National Social Security System (SISN). Health insurance aims to guarantee that participants receive health care benefits and protection to meet their basic health needs. The organizer of this health insurance is the Social Security Administering Body (BPJS) Health (Sekretaris Negara Republik Indonesia, 2004).

National Health Insurance (JKN) is a governmental initiative designed to ensure health coverage for all citizens of Indonesia. This initiative is overseen by the Social Security Administering Agency (BPJS) Health and has been executed in numerous healthcare establishments, encompassing private and public hospitals. Since its inception in 2014, the number of JKN participants has consistently risen, surpassing 252 million individuals by 2023. As the number of participants increases, optimizing services presents a significant problem for BPJS Kesehatan (Dewan Jaminan Sosial Nasional, 2024).

The JKN Mobile application, which BPJS Kesehatan developed in November 2017, is a digital transformation of the business model that has been in place since then. It is utilized as a participant registration tool, facilitating the registration of new or updated JKN participant data to enhance the services provided to National Health Insurance participants through the Healthy Indonesia Card (JKN-KIS) (Saryoko et al., 2019).

BPJS Kesehatan has created a JKN mobile application to enhance efficiency and facilitate access to services. This application aims to assist participants in accessing membership information and health services and facilitate online queuing at health facilities. Research indicates that utilizing the JKN mobile application in healthcare services can enhance administrative efficiency by as much as 30% and decrease patient waiting times at medical facilities (Kemenkes, 2021).

JKN Mobile is an app designed to enhance the efficiency of public services. This application is available without any time restrictions, which is anticipated to enhance public satisfaction among BPJS Kesehatan participants. Satisfaction is assessed by comparing the expectations with the performance of the JKN application (Firmana et al., 2023).

Research conducted by Herlinawati et al. (2021) indicated that the satisfaction level for JKN Mobile exceeded 75% across several areas: application usage, complaint handling, usage time, data confidentiality, usage costs, and the application's attractive and informative design. The satisfaction level regarding the completeness of the JKN Mobile application features is 70%.

Research by Khusna et al. (2021) the satisfaction and ongoing use of the JKN Mobile application in Sidoarjo Regency revealed that information quality, as a component of service quality, significantly impacts user satisfaction and the intention to continue using the JKN Mobile application. The results of observations indicate that a significant number of BPJS Kesehatan participants continue to visit the Sidoarjo Regency BPJS Kesehatan office.

The research that was conducted in Demak Regency to determine the level of satisfaction of JKN Mobile BPJS Kesehatan users concluded that the dimensions of efficiency, fulfilment, system availability, confidentiality, responsiveness, and compensation were related to the satisfaction of JKN Mobile users. The contact dimension was the only dimension not related to the satisfaction of JKN Mobile users. In general, it is possible to conclude that the percentage of satisfied users is eighty percent (Rohmah et al., 2024).

As health facilities collaborating with BPJS Kesehatan, private hospitals in West Bekasi endeavour to enhance services for JKN patients. The efficacy of the JKN mobile application in enhancing hospital services remains a subject of discussion. Obstacles include insufficient

patient socialization, restricted digital access, and incompatibility between the hospital system and the JKN application.

This study aims to investigate further the extent to which JKN mobile applications can improve BPJS Kesehatan services in private hospitals in West Bekasi. This study aims to assess the efficacy of using JKN applications, identify challenges, and make recommendations for optimizing technology-based health services.

Research Problem Formulation

The assessment of JKN Mobile customer satisfaction in private hospitals in West Bekasi has not been conducted, which is essential for enhancing the services offered by these institutions. The SERVQUAL method is employed to assess the service quality of the JKN Mobile application. The SERVQUAL approach enables private hospitals in West Bekasi to identify patient requirements and assess discontent related to the JKN Mobile.

Research Objective

This study aims to assess the quality of JKN Mobile services in private hospitals in West Bekasi, with the intention of offering recommendations for enhancements based on SERVQUAL metrics. This study project aims to enhance the competitiveness of private hospitals in West Bekasi.

LITERATURE REVIEW

Definition of Satisfaction

Satisfaction is a process. This theoretical stream appears to have originated in discrepancy theory, as various authors have used the comparison approach to express satisfaction over time. Early contributions include contrast theory, which posits that purchasers will exaggerate any differences between their expectations and evaluations of a product. According to this paradigm, customer satisfaction evaluations are based on consumers' views of the gap between their perceptions of performance and their predictions (or expectations) of performance (Parker & Mathews, 2001).

Satisfaction as an outcome. Recently, renewed attention has focused on the nature (rather than the cause) of satisfaction: (1) Emotion. Viewing satisfaction as the surprise element of product acquisition and/or consumption experience, other researchers have viewed satisfaction as an effective response to a particular consumption experience. This view acknowledges the input of comparative cognitive processes but suggests that this may be only one determinant of affective "state" satisfaction. (2) Fulfilment. Motivation theory suggests that people are driven by a desire to satisfy their needs or that their behaviour is directed toward achieving relevant goals. Either way, satisfaction can be viewed as the endpoint in the motivational process. (3) Condition. The four-condition framework of satisfaction links satisfaction to reinforcement and arousal. Low arousal satisfaction is described as "satisfaction-as-satisfaction". High arousal satisfaction is referred to as "satisfaction-as-surprise'' which can be either positive (pleasure) or negative (surprise) (Parker & Mathews, 2001).

Contrast theory, initially introduced by Hovland et al. (1957), is defined as the propensity to amplify the disparities between an individual's attitude and the attitude expressed in an opinion statement. Contrast theory presents an alternative viewpoint on the consumer's post-use evaluation process compared to assimilation theory, as it posits that post-use evaluations provide conflicting predictions on the influence of expectations on pleasure. Assimilation theory posits that consumers strive to minimize the gap between expectations and performance,

whereas contrast theory indicates that surprise can either intensify or aggravate these inconsistencies.

Quality of Service

Services are fundamentally performances rather than physical products, complicating the ability of companies to define and uphold exact manufacturing standards for uniform quality. Service quality is not generated in a production facility and subsequently provided to the consumer in its unaltered state. Service quality is generally manifested during the delivery process, frequently through interactions between customers and the service provider's representatives. The quality of service is significantly influenced by staff performance, an organizational asset that cannot be managed to the same degree as the engineering elements of physical products (Zeithaml et al., 1988).

The SERVQUAL model, first proposed by Parasuraman et al. (1988), describes the distinction between perceived service quality (PSQ) and customer expectations during the service delivery process. SERVQUAL has ten measuring dimensions: tangibles, reliability, responsiveness, credibility, courtesy, security, competence, communication, access, and comprehension. Furthermore, component analysis is utilized to reduce the prior service quality model's ten dimensions to five measurement dimensions: tangibles, reliability, responsiveness, assurance, and empathy, enhancing its applicability in various service industries.

The five characteristics of healthcare service quality positively influence customer experience following service contacts and can also impact consumer trust and loyalty. Subpar service quality can diminish consumer trust and loyalty, adversely affect post-encounter experiences and prompting client attrition. This study suggests that superior service quality in hospitals enhances patients' service encounter experiences and elevates their trust and loyalty towards the institution (Shie et al., 2022).

Public Service

Health services refer to providing healthcare to the community, primarily aimed at preventive and promotive initiatives that encourage health improvement among diverse populations. These efforts, whether undertaken individually or collectively within an organization, focus on maintaining and enhancing health, preventing and treating diseases, and restoring the well-being of individuals, families, and communities. Another perspective posits that public services encompass activities aimed at assisting the community to foster communal happiness. To achieve this satisfaction, sensitivity is required between service providers and recipients (Firmana et al., 2023).

SERVQUAL Method

Among the various methods for assessing service quality, SERVQUAL is the most utilized approach. In its entirety, SERVQUAL evaluates five gaps, with particular focus on the disparity between customer perception and expectations. The assessment of service quality variables is referred to as the service quality model (SERVQUAL) (Saryoko et al., 2019) .

The SERVQUAL approach assesses the difference between two key variables: expected and perceived service. The SERVQUAL method is the discrepancy between reality and customer expectations for the service supplied (Yuniar et al., 2014).

Service quality can be encapsulated into five primary dimensions, which are (Firmana et al., 2023):
1. Physical evidence (tangibles), encompassing tangible facilities, equipment, staff, and communication mediums.

2. Reliability encompasses the capacity to deliver promised services with precision, punctuality, and satisfaction that meets expectations.
3. Responsiveness denotes the capacity and readiness of employees to deliver necessary services with promptness and attentiveness.
4. Assurance encompasses employees' comprehension, resilience, amicability, and reliability, fostering an environment where customers feel secure and unencumbered by uncertainty and apprehension.
5. Empathy pertains to effective communication, comprehension, and individualized attention to consumer requirements.

There are five gaps in the SEVQUAL method, namely (Yuniar et al., 2014) :
1. Gap 1, specifically the disparity between management's understanding of consumer expectations and the actual consumer expectations.
2. Gap 2, specifically, the discrepancy in service quality criteria.
3. Gap 3, specifically, the discrepancy that arises during the delivery of services. Gap 3 has a negative value since the service delivery cannot meet the target, and there is no target measurement.
4. Gap 4, specifically the disparity between service provision and external communication.
5. Gap 5, specifically the disparity between customer expectations and consumer views. This discrepancy indicates that the perceived service does not align with the anticipated service.

Quantitative Method

Quantitative research is a formal, objective, logical, deductive methodology employing systematic ways for producing and improving information to address problems. The designs are categorized as either experimental or non-experimental, aiming to get precise and dependable measurements. Quantitative research elucidates phenomena by gathering stable numerical data, which is evaluated by mathematically grounded methodologies, particularly statistics, addressing inquiries regarding who, what, when, where, how much, how many, and how. It pertains to numerical data, logical reasoning, and an impartial perspective. This is unique research in which the investigator determines the study focus, formulates specific, narrow questions, gathers quantifiable data from participants, analyses the data using statistical methods, and performs the investigation in an impartial, objective manner (Mohajan, 2020).

Related Research

Some studies pertinent to this research involve using the SERVQUAL method to evaluate services on the JKN mobile application by (Anastasya et al., 2024; Saputra et al., 2025) . This research aims to ascertain the extent of public satisfaction with online registration services and identify the factors that should be prioritized in online registration with the JKN Mobile application to meet public expectations. This analysis is employed to ascertain the public's desires and requirements to ensure consistent expectations and desires.

RESEARCH METHOD

Research Methods

This study is descriptive research that employs the SERVQUAL and quantitative method to assess patient satisfaction levels in using the JKN Mobile at private hospitals in West Bekasi.

Research Instruments

Evidence-based practice encompasses, in part, the use of results from rigorously conducted quality research investigations. Critiquing quantitative research is a crucial competency for all researchers. Attention must be paid not only to the study's outcomes but also to the research's rigor. Rigour denotes the degree to which researchers endeavoured to improve the quality of the investigations. In quantitative research, this is accomplished by assessing validity and reliability (Ghanad, 2023; Ahmed & Ishtiaq, 2021; Heale & Twycross, 2015).

1. Validity
   Validity is defined as the degree to which a methodology accurately assesses the variable it aims to assess. High dependability indicates outcome validity, while any unreliable data collection approach is likely invalid. Validity pertains to the extent to which the data accurately reflects the genuine findings of the study participants as well as similar individuals who are not involved in the study (Ahmed & Ishtiaq, 2021). There are three major types of validity: (1) content validity, the degree to which a research instrument precisely assesses all dimensions of a construct; (2) construct validity, the degree to which a research instrument accurately assesses the intended concept; (3) criterion validity, the degree of correlation between a research instrument and other measures assessing the same variables (Ghanad, 2023; Ahmed & Ishtiaq, 2021; Heale & Twycross, 2015).

2. Reliability
   Reliability is defined as the consistency of a procedure in quantifying a variable. A measurement is deemed dependable if it regularly yields the same result when the same approach is applied under comparable conditions. The trustworthiness of research must be considered during the data collection procedure. When employing a data-collection technique or tool, it is essential that the data be reliable, precise, and reproducible. It is imperative that the approach be meticulously designed and consistently implemented, particularly when numerous researchers participate in data collecting (Ghanad, 2023; Ahmed & Ishtiaq, 2021; Heale & Twycross, 2015). There are three attributes of reliability: (1) homogeneity, the degree to which all elements on a scale assess a singular construct; (2) stability, the reliability of outcomes obtained from an instrument subjected to repeated testing; (3) equivalence, consistency in reactions among many users of an instrument, or between different versions of an instrument (Ghanad, 2023; Heale & Twycross, 2015)

Data Collection Technique

Data collection is a methodology employed by researchers to gather information. Methods for articulating abstract concepts that are not physically manifested but can be discerned through their application, including questionnaires, case studies, observations, investigations, documentation, and others (Sukmawati et al., 2023).

The questionnaire is a prevalent tool for information collection, comprising a set of questions and corresponding responses that respondents from a designated community complete to provide the researcher with necessary data for the study (Taherdoost, 2021).

The primary data in this study is a questionnaire consisting of 10 questions, while the secondary data is a literature study.

Data Analysis

The method that was utilized in this analysis was a quantitative data analysis method that utilized the SERVQUAL method. The purpose of this analysis was to determine the expectations and perceptions of users of the JKN Mobile application, as well as the gap that

exists between the two. Both expectation and perception questionnaires were developed, and the results were arranged according to a Likert scale that ranged from 1 to 5.

The steps that need to be taken in the SERVQUAL method are as follows (Yuniar et al., 2014):

1. Determine the average expectation value ($\bar{P}$) for each variable.

$$\bar{P} = \frac{\sum_{i=1}^{n} Pi}{n}$$

Where:

P_i : The perception value given by patients for question i

N : Number of respondents

2. Determine the average perception value ($\bar{E}$) for each variable.

$$\bar{E} = \frac{\sum_{i=1}^{n} Ei}{n}$$

Where:

E_i : The expectation value given by patients for question i

N : Number of respondents

3. Determine the SERVQUAL Score (S) for each variable.

$$S = \bar{P} - \bar{E}$$

Population

Patients who were under the care of private hospitals in West Bekasi and who had either utilized or registered for the JKN Mobile application were the focus of this research program. In this study, the population consisted of 77 individuals.

Sample

The method of sampling that was utilized in this study was known as nonprobability sampling. Instead of utilizing a random selection method, non-probability sampling approaches employ a process in which the sample is picked based on the researcher's own subjective evaluation of the situation (Berndt, 2020; Hossan et al., 2023).

To determine the sample size, this study is using the Slovin Formula (Nyimbili & Nyimbili, 2024):

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n : Sample

N : Population

e : error

The number of samples was rounded up to 65.

RESULTH AND DISCUSSION

Research Data Description

There is a significant relationship between customer satisfaction, perception, and expectation when it comes to using the JKN Mobile application. A total of individuals who are already in possession of the JKN Mobile application or account participated in this survey as respondents. During this study, several tests, including validity tests, reliability tests, and

SERVQUAL methodologies, will be carried out. It is going to be described as follows to provide a more comprehensive discussion:

Respondent Overview

Data on the identities of respondents was gathered from the questionnaires that were filled out by respondents. This data was differentiated according to gender, age, the length of time that they had used JKN Mobile, and their respective viewpoints.

1. Respondent Gender

The identities of the respondents are differentiated according to their gender, specifically male and female. The following table provides an overview of the male and female respondents in terms of their frequency:

Table 1. Respondent Gender

Gender	Quantity	Percentage
Male	26	34%
Female	51	66%
Total	77	100%

Source: Researcher Data Processing, 2025

According to Table 1, the ratio of females to males in terms of the number of respondents is the most significant, with women being the majority. The results of this survey indicate that women make up the majority of those who utilize the JKN Mobile application among respondents.
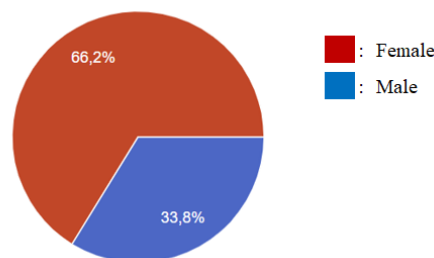

Figure 1. Respondent Gender
Source: Researcher Data Processing, 2025

2. Respondent Age

The ages of the respondents are used to differentiate between them into six categories: 20 – 30 years, 31 – 40 years, 41 – 50 years, 51 – 60 years, 61 – 70 years, and >70 years. The following table provides an overview of the typical ages of those who participated in the survey:

Table 2. Respondent Age

Age	Quantity	Percentage
20 – 30 years	9	12%
31 – 40 years	26	34%
41 – 50 years	18	23%
51 – 60 years	10	13%
61 – 70 years	9	12%
>70 years	5	6%

Total	77	100%

Source: Researcher Data Processing, 2025

According to Table 2, the respondent age group of 31 – 40 years makes up the biggest proportion of respondents (in terms of age). Following that, respondents were in the group 41 – 50 years old. This demonstrates that most respondents who use the JKN Mobile application are older people, specifically those between the ages of 31 and 50 years.
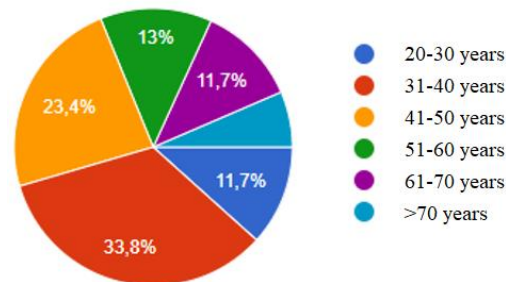

Figure 2. Respondent Age
Source: Researcher Data Processing, 2025

3. Length of Use of JKN Mobile Application

Respondents' identities are further differentiated according to the duration of their use of the JKN Mobile application, which is divided into three categories: 0 – 6 months, 1 year, and more than 1 year. The subsequent table illustrates the frequency of use time:

Table 3. Length of Use of JKN Mobile

Age	Quantity	Percentage
0-6 months	15	19%
1 year	25	32%
>1 year	37	48%
Total	15	100%

Source: Researcher Data Processing, 2025

According to Table 3, the respondent who are >1 year makes up the biggest proportion of respondents. Following that, respondents were in group 1 year. This demonstrates that most respondents who use the JKN Mobile have been using it for >1 year.
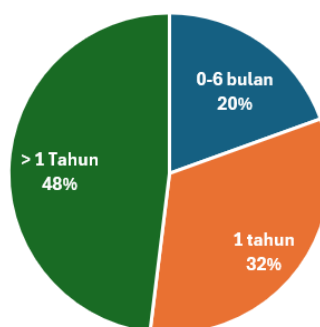

Figure 3. Respondent Age
Source: Researcher Data Processing, 2025

4. Educational Background

Respondents' identities are further differentiated according to their educational background, which is divided into six categories: elementary, junior high, senior high, Diploma, bachelor's degree, and post-graduate degree. The subsequent table illustrates the frequency of educational background:

Table 4. Educational Background

Age	Quantity	Percentage
Elementary	1	1%
Junior High	2	3%
Senior High	5	6%
Diploma	20	26%
Bachelor's Degree	40	52%
Post-graduate Degree	9	12%
Total	77	100%

Source: Researcher Data Processing, 2025

According to Table 4, the respondent who are bachelor's degree makes up the biggest proportion of respondents. Following that, respondents were in diploma. This demonstrates that most respondents using the JKN Mobile were bachelor's degree.
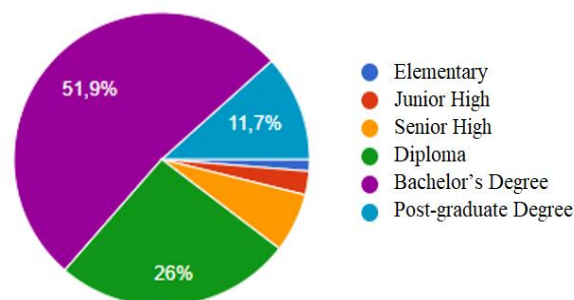

Figure 4. Educational Background
Source: Researcher Data Processing, 2025

5. Occupation

Respondents' identities are further differentiated according to their occupation, which is divided into eight categories: housewives, private employees, government employees, military or police, professionals, business owners, retired, and others. The subsequent table illustrates the frequency of educational background:

Table 5. Occupation

Age	Quantity	Percentage
Students	1	1%
Housewives	14	18%
Private Employees	34	44%
Government Employees	6	8%
Military or Police	1	1%
Professionals	7	9%
Business owners	6	8%
Retired	7	9%
Others	1	1%
Total	77	100%

Source: Researcher Data Processing, 2025

According to Table 5, the respondent who are private employees makes up the biggest proportion of respondents. Following that, respondents were housewives. This demonstrates that most respondents using the JKN Mobile were private employees.
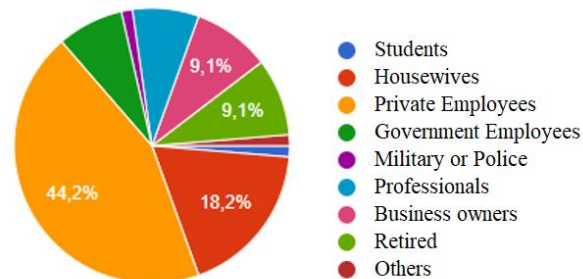

Figure 5. Occupation
Source: Researcher Data Processing, 2025

Validity and Reliability Test Results

Before conducting the data validity and reliability test, the researcher distributed questionnaires to 65 respondents. After the data collected is sufficient, a validity and reliability test of the data obtained from the respondents will be conducted. This is done to measure the level of valid and reliable statements.

Examining the Pearson correlation value of sig is one method that may be utilized to establish validity. The item is legitimate if the Pearson correlation value exceeds the r table value. Alternatively, if the sig value is lower than 0.05, it indicates that the item is valid with a confidence level of 95%. Both values are considered valid (Janna & Herianto, 2021).

Validity tests for each variable can be seen in the table below:

Table 6. Results of Validity Test of Expectation

Expectation				
No	Attribute	r calculation	r table	Remarks
1	Are you satisfied with using the JKN Mobile application?	0.711	0.244	Valid
2	Can the Menu or Features Work Properly?	0.793	0.244	Valid
3	Is the JKN Mobile Application Very Useful for Its Users?	0.573	0.244	Valid
4	Overall, does JKN Mobile help with getting services or resolving problems?	0.748	0.244	Valid
5	In general, are you happy with the JKN Mobile application?	0.581	0.244	Valid
6	Does this application not require any special skills?	0.582	0.244	Valid
7	Can using the JKN Mobile application save time and costs in getting services?	0.514	0.244	Valid
8	Is the JKN Mobile application easy to understand and learn?	0.802	0.244	Valid
9	Is the display of menu features in the JKN Mobile application complete?	0.782	0.244	Valid
10	Do you use the JKN Mobile application because of the influence of social media or mass media?	0.529	0.244	Valid

Source: Researcher Data Processing, 2025

Table 7. Results of Validity Test of Perception

No	Attribute	r calculation	r table	Remarks
Perception				
1	Are you satisfied with using the JKN Mobile application?	0.805	0.244	Valid
2	Can the Menu or Features Work Properly?	0.744	0.244	Valid
3	Is the JKN Mobile Application Very Useful for Its Users?	0.640	0.244	Valid
4	Overall, does JKN Mobile help with getting services or resolving problems?	0.745	0.244	Valid
5	In general, are you happy with the JKN Mobile application?	0.648	0.244	Valid
6	Does this application not require any special skills?	0.757	0.244	Valid
7	Can using the JKN Mobile application save time and costs in getting services?	0.604	0.244	Valid
8	Is the JKN Mobile application easy to understand and learn?	0.852	0.244	Valid
9	Is the display of menu features in the JKN Mobile application complete?	0.828	0.244	Valid
10	Do you use the JKN Mobile application because of the influence of social media or mass media?	0.506	0.244	Valid

Source: Researcher Data Processing, 2025

Based on Tables 6 and 7, it is evident that all the items of the statement instrument about the expectations and perceptions of users of the JKN Mobile application are genuine. This is demonstrated by the r-count value being higher than the r-table value, which indicates that the r-count value is greater than the r-table value. It is possible to determine the value of the r-table by applying the formula df = n-2 = 65 – 2 = 63. If this method is used, the value of 0.244 is displayed in row 48 of the r-table. Considering this, it is possible to conclude that the entire statement instrument can be utilized in this investigation.

Reliability Test Results

Reliability testing was carried out using the SPSS 25 application in conjunction with the Cronbach's Alpha method to determine the reliability of the data collected from the distribution of questionnaires. For the questionnaire to be reliable, the Cronbach's Alpha value must be more than 0.60.

Table 8. Results of Reliability Expectations

Reliability Statistics

Cronbach's Alpha	N of Items
.782	10

Source: Researcher Data Processing, 2025

According to Table 8, the value of Cronbach's Alpha for expectations is 0.782. This indicates that the value of Cronbach's Alpha exceeds 0.60. It can be deduced that this questionnaire demonstrates reliability.

Table 9. Results of Reliability Perceptions

Reliability Statistics

Cronbach's Alpha	N of Items
.823	10

Source: Researcher Data Processing, 2025

According to Table 9, the value of Cronbach's Alpha for perceptions is 0.823. This indicates that the value of Cronbach's Alpha exceeds 0.60. It can be deduced that this questionnaire demonstrates reliability.

Calculation and Average of the Expectations Questionnaire

In this section, the value of expectations of patients who have used the JKN Mobile application is calculated. Calculating the average value of the level of expectations is carried out by weighing. For the assessment of the level of expectations, the following scales and weights are used:

a. Strongly Agree with a weight of 5
b. Agree with a weight of 4
c. Less Agree with a weight of 3
d. Disagree with a weight of 2
e. Strongly Disagree with a weight of 1

The formula used in calculating the total weight is:

$$\sum x_i = \left(\sum SD \, x \, 1\right) + \left(\sum D \, x \, 2\right) + \left(\sum LA \, x \, 3\right) + \left(\sum A \, x \, 4\right) + \left(\sum SA \, x \, 5\right)$$

Where:

$\sum x_i$: total weight of statement answers

$\sum SD$: the number of respondents who chose the answer strongly disagree

$\sum D$: the number of respondents who chose the answer disagree

$\sum LA$: the number of respondents who chose the answer less agree

$\sum A$: the number of respondents who chose the answer agree

$\sum SA$: the number of respondents who chose the answer strongly agree

1,2,3,4,5: scores for Likert Scale

The formula used in calculating the average (mean) of an attribute is:

$$\bar{X} = \frac{\sum xi}{n}$$

Where:
$\bar{X}$: average respondent's answer (mean)
$\sum xi$: sum of the weights of the answers to statement n
n : number of respondents

The following are the results of calculations on the variables of expectations regarding the use of the JKN Mobile Application at the Private Hospital in West Bekasi, as follows:

Table 10. Average Expectations Value

No	Remarks	SD	D	LA	A	SA	∑xi	Avg
	Weight	1	2	3	4	5		
1	Are you satisfied with using the JKN Mobile application?	0	0	4	41	32	336	5.17
2	Can the Menu or Features Work Properly?	0	0	6	51	20	322	4.95
3	Is the JKN Mobile Application Very Useful for Its Users?	0	0	2	34	41	347	5.34
4	Overall, does JKN Mobile help with getting services or resolving problems?	0	0	2	49	26	332	5.11
5	In general, are you happy with the JKN Mobile application?	0	0	1	43	33	340	5.23
6	Does this application not require any special skills?	0	3	14	46	14	302	4.65
7	Can using the JKN Mobile application save time and costs in getting services?	0	0	4	32	41	345	5.31
8	Is the JKN Mobile application easy to understand and learn?	0	2	5	50	20	319	4.91
9	Is the display of menu features in the JKN Mobile application complete?	0	0	5	57	15	318	4.89
10	Do you use the JKN Mobile application because of the influence of social media or mass media?	37	6	8	14	12	189	2.91

Source: Researcher Data Processing, 2025

Perceptions Questionnaire Calculation and Average

In this section, the calculation of the value of the perceptions of patients who have used the JKN Mobile application is carried out. The calculation of the average value of the level of perceptions is carried out by weighting. For the assessment of the level of perceptions, the following scales and weights are used:

a. Strongly Agree with a weight of 5
b. Agree with a weight of 4
c. Less Agree with a weight of 3
d. Disagree with a weight of 2
e. Strongly Disagree with a weight of 1

The formula used in calculating the total weight is:

$$\sum x_i = \left(\sum SD \; x \; 1\right) + \left(\sum D \; x \; 2\right) + \left(\sum LA \; x \; 3\right) + \left(\sum A \; x \; 4\right) + \left(\sum SA \; x \; 5\right)$$

Where:

$\sum x_i$: total weight of statement answers

$\sum SD$: the number of respondents who chose the answer strongly disagree

$\sum D$: the number of respondents who chose the answer disagree

$\sum LA$: the number of respondents who chose the answer less agree

$\sum A$: the number of respondents who chose the answer agree

$\sum SA$: the number of respondents who chose the answer strongly agree
1,2,3,4,5: scores for Likert Scale

The formula used in calculating the average (mean) of an attribute is:

$$\overline{X} = \frac{\sum xi}{n}$$

Where:
$\overline{X}$: average respondent's answer (mean)
$\Sigma \, xi$: sum of the weights of the answers to statement n
n : number of respondents

The following are the results of calculations on the variables of perceptions regarding the use of the JKN Mobile Application at the Private Hospital in West Bekasi, as follows:

Table 11. Average Perceptions Value

No	Remarks	SD	D	LA	A	SA	$\sum$xi	Avg
	Weight	1	2	3	4	5		
1	Are you satisfied with using the JKN Mobile application?	0	0	5	50	22	325	5.00
2	Can the Menu or Features Work Properly?	0	1	6	54	16	316	4.86
3	Is the JKN Mobile Application Very Useful for Its Users?	0	0	4	36	37	341	5.25
4	Overall, does JKN Mobile help with getting services or resolving problems?	0	0	6	51	20	322	4.95
5	In general, are you happy with the JKN Mobile application?	0	0	3	41	33	338	5.20
6	Does this application not require any special skills?	0	3	15	44	15	302	4.65
7	Can using the JKN Mobile application save time and costs in getting services?	0	0	3	34	40	345	5.31
8	Is the JKN Mobile application easy to understand and learn?	0	0	10	52	15	313	4.82
9	Is the display of menu features in the JKN Mobile application complete?	0	0	3	58	16	321	4.94
10	Do you use the JKN Mobile application because of the influence of social media or mass media?	39	5	7	16	10	184	2.83

Source: Researcher Data Processing, 2025

SERVQUAL Value Calculation (Gap) Per Item

Utilizing the following equation, one can determine the value of the gap that exists between the degree of expectations and the public perception regarding the use of the JKN Mobile application:

$$Q = P - E$$

Where:
Q : Service Quality
P : Perceptions
E : Expectations

The outcome of calculating the gap value for each item is based on the disparity between the levels of perception and expectations to ascertain the degree to which the JKN Mobile application satisfies the requirements of its users. You can view the results in the table provided below:

Table 12. GAP per Item

No	Attribute	Average per item		GAP (P-E)
		Perceptions	Expectations	
1	Are you satisfied with using the JKN Mobile application?	5.17	5.00	0.17
2	Can the Menu or Features Work Properly?	4.95	4.86	0.09
3	Is the JKN Mobile Application Very Useful for Its Users?	5.34	5.25	0.09
4	Overall, does JKN Mobile help with getting services or resolving problems?	5.11	4.95	0.15
5	In general, are you happy with the JKN Mobile application?	5.23	5.20	0.03
6	Does this application not require any special skills?	4.65	4.65	0.00
7	Can using the JKN Mobile application save time and costs in getting services?	5.31	5.31	0.00
8	Is the JKN Mobile application easy to understand and learn?	4.91	4.82	0.09
9	Is the display of menu features in the JKN Mobile application complete?	4.89	4.94	-0.05
10	Do you use the JKN Mobile application because of the influence of social media or mass media?	2.91	2.83	0.08

Source: Researcher Data Processing, 2025

Table 12 illustrates that not all entries exhibit gaps; however, those that do are found in attribute point 9. Users have indicated that the JKN Mobile application contains menus and features that do not fully meet the needs of patients.

CONLUSION

The research conducted at the Private Hospital in West Bekasi leads to the following conclusions:
1. The calculations reveal one attribute with gaps; specifically, point 9 shows a gap of -0.05. The researcher concludes that public satisfaction with the JKN Mobile application is lacking, particularly regarding its features and the menu provided. The features do not function effectively, and the response from JKN Mobile officers to issues is slow and unresponsive, resulting in inadequate support for the problems faced by the users.
2. The calculations indicate that not all users of the JKN Mobile application are satisfied due to several factors, including issues with menus and features that are not complete and function properly, as well as a lack of response from officers in addressing the problems or obstacles faced by users.

RECOMMENDATIONS

1. Concerning the menu or features of JKN Mobile, feedback from respondents indicated that the menu or features were not functioning correctly and were lacking in completeness. The

researcher suggested that the menu and features in the JKN Mobile application should be fully developed to ensure proper functionality, allowing users to navigate the application seamlessly and meet their needs effectively.

2. The existence of the JKN Mobile application is intended to assist users in accessing services or addressing obstacles. However, feedback from respondents indicates that it is not very effective in resolving issues. This is primarily due to the inadequate responses from service officers or customer service, which prevents users from overcoming their challenges and utilizing the JKN Mobile application to its full potential.

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