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Factors Influencing The Use Of The JKN Mobile Application In Rupit District, North Musi Rawas Regency

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Abstract

The use of digital health services through the Mobile JKN application has become an important part of the transformation of health services in the digital era. However, the use of the Mobile JKN application in the community is still not optimal. This study aims to analyze the relationship between perceived usefulness, perceived ease of use, attitudes toward use, and intention to use with the use of the Mobile JKN application. This study used a quantitative design with a cross-sectional approach. The study population was JKN participants in the Rupit Community Health Center working area with a sample of 96 respondents selected using an accidental sampling technique. The research instrument used a structured questionnaire, while data analysis was carried out using the chi-square test and the calculation of the Prevalence Ratio (PR). The results showed a significant relationship between perceived usefulness (p = 0.045; PR = 2.02), perceived ease of use (p = 0.000; PR = 3.36), attitudes toward use (p = 0.017; PR = 3.31), and intention to use (p = 0.027; PR = 2.14) with the use of the Mobile JKN application. Perceived ease of use was the factor with the greatest risk value for not using the application. The conclusion of this study is that factors in the Technology Acceptance Model are related to the use of the Mobile JKN application, so that increasing ease, benefits, positive attitudes, and usage intentions need to be strengthened to increase sustainable use of the application.

Keywords: Behavioral Intention, Mobile JKN, Perceived Ease of Use, Perceived Usefulness, Technology Acceptance Model.

INTRODUCTION

The National Social Security System (SJSN) in Indonesia, as stipulated in Law Number 40 of 2004, has become a key pillar in realizing universal health access through the National Health Insurance (JKN) managed by BPJS Kesehatan. Globally, similar programs such as National Health Insurance in various countries show a trend of increasing coverage to 95% of the population by 2023–2025, driven by digital transformation following the COVID-19 pandemic (World Bank, 2023). In Indonesia, JKN successfully reached more than 90% of the population by 2024, with a significant impact on increasing maternal services such as antenatal care and facility-based deliveries by up to 9.6 percentage points (Health Policy Agency, 2026). However, challenges such as inequities in service quality and financing remain, emphasizing the urgency of digital innovation for efficiency (Pratama et al., 2026).

As part of this transformation, the Mobile JKN application launched in 2017 is continuously updated to support online registration, virtual queues, and complaints, in line with the increase in JKN participants reaching 222 million people in 2019 and continuing to grow until 2025. This innovation is crucial amidst the target of 95% participation by 2026, where application usage reaches millions on Android and iOS platforms, although it is still dominated by urban areas (Ministry of Health, 2023). Practically, Mobile JKN reduces the administrative burden of primary health facilities (FKTP), but its utilization is not optimal in rural areas such as South Sumatra, with activation rates below 40% in several districts in 2024.

The Technology Acceptance Model (TAM) has been widely used to analyze the acceptance of the Mobile JKN application, where perceived usefulness (PU) and perceived ease of use (PEOU) are the main predictors of actual use. A study by Jazillatul Maghfiroh et al. found a usage rate of only 4.15%, caused by low PU because the features were not considered significantly beneficial compared to manual services, and low PEOU due to operational difficulties (Maghfiroh et al., 2023) [internal reference 6]. Similarly, research in Bekasi showed a strong correlation (r=0.862) between application effectiveness and service, with a 74.3% contribution to satisfaction (Sari, 2025).

However, study results show inconsistencies: in urban areas such as Surakarta, satisfaction reached 81.4% CSI with a positive gap (Widodo et al., 2023), while in rural areas such as Jambi, effectiveness was only 68.51% due to weak infrastructure and low digital literacy (Rahman, 2024). The main limitations of previous studies include urban-centric samples, the lack of attitudinal and behavioral intention variables in the complete TAM, and the minimal focus on rural contexts such as North Musi Rawas Regency (Muratara), where 2024 BPJS data showed Mobile JKN activation in Rupit District was <40% despite the availability of FKTP facilities (BPJS Kesehatan Lubuklinggau Branch, 2024) [internal reference].

An explicit research gap lies in the lack of comprehensive TAM studies (PU, PEOU, attitude, behavioral intention towards actual use) in rural areas such as Rupit District—the center of Muratara government with 38,901 people and varying densities (BPS, 2024) [internal reference 4]—where the digital divide worsens JKN access. Problem statement: Although Mobile JKN is designed for efficiency, low usage in rural areas due to TAM factors has not been empirically tested, hampering the digital transformation of national health.

This study aims to analyze the relationship between PU, PEOU, attitudes, and intentions to use with the actual use of Mobile JKN in Rupit District, with high urgency considering youth unemployment and graduate unemployment in 2026 which demands fast health services. The novelty lies in the first complete TAM application in the rural context of South Sumatra, filling the rural-urban gap; theoretical contributions enrich the TAM literature in Indonesian digital health (Rahmani et al., 2025), while practically providing recommendations for BPJS and community health centers for targeted socialization, application optimization, and queue reduction at FKTP.

RESEARCH METHODS

This study adopted a quantitative approach with a non-experimental cross-sectional survey design to efficiently test the relationship between Technology Acceptance Model (TAM) variables at a single measurement point (Sugiyono, 2023). This design is suitable for describing perceived usefulness, ease of use, attitudes, and intentions towards actual use of the Mobile JKN application without intervention, as applied in similar studies in the Indonesian digital health context (Rahmani et al., 2025; Widodo et al., 2023). The research location was focused on Rupit District, North Musi Rawas Regency, South Sumatra, during November 2025–March 2026, because the Mobile JKN activation rate was below 40% despite JKN participants reaching thousands (BPJS Kesehatan, 2024).

The population included 3,981 active JKN participants in Rupit District in 2025, with a sample of 106 respondents calculated using the Lemeshow finite population correction formula (Z=1.96; p=0.5; d=0.1) plus a 10% reserve (Lemeshow et al., 1990; Sudaryono, 2022). A multistage cluster random sampling technique was applied: the first stage selected Rupit District, the second stage randomly selected Bingin Rupit and Maur Baru Villages, the third stage selected specific hamlets (01, 03, 06; 02, 04, 07), and the final stage door-to-door respondents until the quota was reached (Emzir, 2021). Inclusion criteria included JKN participants aged ≥17 years who were willing to participate; exclusion criteria included communication/cognitive disorders, ensuring representativeness and data quality (Creswell & Creswell, 2023).

The main instrument was a structured questionnaire based on TAM with 8–10 4-point Likert items (1=strongly disagree to 4=strongly agree) per variable, categorized binary (good/poor or use/not) for Chi-Square analysis (Davis, 1989). Pearson Product Moment validity test ($r_{table}=0.361$; $\alpha=0.05$) yielded valid items after elimination (e.g., 8 perceived usefulness items, Cronbach's Alpha=0.867), while Cronbach's Alpha reliability ≥0.70 for all variables, confirmed in similar pilot samples (Hair et al., 2022; Sari, 2025). Operational definitions included specific indicators such as time efficiency for actual use (score ≥25=use).

The procedure began with preparation (ethical clearance, instrument testing), followed by primary data collection via door-to-door questionnaires in selected hamlets with informed consent,

and secondary data from the Central Statistics Agency (BPS) and the Social Security Agency (BPJS) (Sugiyono, 2023). Data collection was carried out by trained enumerators to minimize bias, with on-site completeness checks, followed by data coding and cleaning in SPSS prior to analysis (Etikan & Bala, 2021).

Univariate analysis describes the frequency/percentage of respondent characteristics and variables via distribution tables, while bivariate analysis uses Chi-Square (α=0.05; $p \leq 0.05$=significantly related) to test 2×2 categorical associations, in accordance with the objectives of the TAM hypothesis (Field, 2024; Maghfiroh et al., 2023). All processes were processed via SPSS v.26 for transparency and replicability.

Ethical considerations included written informed consent, anonymity, data confidentiality, and respect for the dignity of respondents without discrimination, in line with the Helsinki principles and Ministry of Health guidelines (World Medical Association, 2013; Notoatmodjo, 2022). Official permission from the faculty, BPJS, and local government was obtained; data is for research purposes only, with no identification information published.

RESULTS AND DISCUSSION

General Description of Respondent Characteristics

Table 1. Distribution of Respondent Characteristics

Characteristics	n	Percentage (%)
Age Group		
17–25 years	18	17.0
26–35 years	30	28.3
36–45 years	45	42.5
46–55 years	13	12.3
Gender		
Man	43	40.6
Woman	63	59.4
Education		
No school	8	7.5
Elementary School	20	20.8
JUNIOR HIGH SCHOOL	29	25.5
High School/Equivalent	34	32.1
College	15	14.2
Work		
Doesn't work	9	8.5
civil servant	16	15.1
Private sector employee	10	9.4
Housewife	30	28.3
Laborer	18	17.0
Other	23	21.7
Status		
Not Married	16	15.1
Marry	90	84.9
Participation Status		
PBI	80	75.5
Non-PBI	26	24.5

Source: Researcher Processed Data, 2026

Based on Table 1 above, it is known that of the 106 respondents studied, the majority were in the age range of 36–45 years, namely 45 people (42.5%), followed by 26–35 years old as many as 30 people (28.3%), 17–25 years old as many as 18 people (17.0%), and the fewest were 46–55 years old as many as 13 people (12.3%). Based on gender, respondents were dominated by women as many as 63 people (59.4%), while men numbered 43 people (40.6%). The last level of education of the respondents was mostly high school/equivalent as many as 34 people (32.1%), followed by junior high school as many as 29 people (25.5%), elementary school as many as 20 people (20.8%), college as many as 15 people (14.2%), and the fewest were not in school as many as 8 people (27.5%). In terms of occupation, the majority of respondents were housewives (IRT) with 30 people (28.3%), laborers with 20 people (18.9%), civil servants with 16 people (15.1%), private employees with 10 people (9.4%), unemployed with 9 people (8.5%), and other categories with 23 people (17.0%). Other job categories included farmers, village officials, micro, small and medium enterprises (MSMEs), and motorcycle taxi drivers. Based on marital status,

The majority of respondents were married (90 people) (84.9%), while 16 people (15.1%) were unmarried. Based on JKN participant status, the majority of respondents were PBI participants (80 people) (75.5%), while 26 people (24.5%) were non-PBI.

Univariate Test Results Analysis

Table 2. Distribution of Frequency of Use of the JKN Mobile Application

Category	n	Percentage (%)
Use	80	75.5
Do not use	26	24.5
Total	106	100

Source: Researcher Processed Data, 2026

Of the 106 respondents, the majority (80 respondents (75.5%) had used the JKN Mobile App, while 26 (24.5%) had not. This high percentage of use indicates that the JKN Mobile App is widely used by respondents to access healthcare services. This indicates that the app is well-known and accepted as a digital service provider for BPJS Kesehatan.

However, some respondents still haven't used the Mobile JKN app. This indicates that several obstacles remain, such as a lack of understanding of how to use the app, the perception that it's difficult to use, or a lack of experience of its full benefits. Therefore, efforts are needed to increase outreach, education, and feature development to make the app easier to use and meet user needs.

Table 3. Frequency Distribution of Answers to Questions on the Use of the JKN Mobile Application

No	Statement	Use	Do not use	Mean	Elementary School
1	I see the service or polyclinic schedule through the application.	79 (74.5%)	27 (25.5%)	4.10	0.90
2	I checked the contribution in the application.	80 (75.5%)	26 (24.5%)	4.12	0.88
3	I checked my membership status via Mobile JKN.	81 (76.4%)	25 (23.6%)	4.15	0.81
4	I use Mobile JKN because it helps me save time.	81 (76.4%)	25 (23.6%)	4.16	0.84
5	I use Mobile JKN to search for health information.	82 (77.4%)	24 (22.6%)	4.18	0.66

6	I have submitted a complaint via Mobile JKN.	82 (77.4%)	24 (22.6%)	4.19	0.71
7	I searched for health facility information through the application.	83 (78.3%)	23 (21.7%)	4.22	0.63
8	I use the online queue feature on Mobile JKN.	84 (79.2%)	22 (20.8%)	4.25	0.59

Source: Researcher Processed Data, 2026

Based on the results of the analysis of the Mobile JKN usage variable, it is known that the majority of respondents have used the application for various JKN service needs.This is evident from the high percentage of respondents who stated they used the application across all statements, ranging from 74.5% to 79.2%. However, there was still a significant proportion of respondents who had not used certain features, as reflected in the percentage in the "not using" category.

The highest percentage of non-use was found in the statement that respondents could view service or polyclinic schedules through the app, at 25.5%. This indicates that the service schedule information feature is still not being optimally utilized by some respondents, possibly because respondents prefer to obtain information directly at the health facility or are less familiar with the feature. Furthermore, the statement regarding contribution checking also showed a relatively high percentage of non-use, at 24.5%, indicating that some respondents are still not accustomed to using the app to monitor contribution payment obligations.

Meanwhile, the percentage of respondents who did not use Mobile JKN to check their membership status and save time was 23.6%. This indicates that although most respondents have utilized the feature, a small number are still unaware of the convenience the application offers in terms of time efficiency and access to membership information. On the other hand, the most widely used feature is the online queue feature, with the lowest percentage of non-use at 20.8% and the highest mean value of 4.25 with a standard deviation of 0.59. This indicates that the online queue feature is one of the features most perceived as beneficial by respondents, especially in reducing waiting times at healthcare facilities.

Overall, the mean score for all statements ranged from 4.10 to 4.25, indicating that respondents tended to agree with the use of Mobile JKN. The relatively small standard deviation indicates that respondents' responses were quite homogeneous. Therefore, it can be concluded that the Mobile JKN application has been widely used by respondents, although some features remain underutilized.

Table 4. Frequency Distribution of Perceived Usefulness

Category	n	Percentage (%)
Benefit	84	79.2
Less Benefit	22	20.8
Total	106	100

Source: Researcher Processed Data, 2026

Based on Table 4, the majority of respondents (84 respondents) considered the Mobile JKN application to be useful, while 22 respondents (20.8%) considered it less useful. For each statement, the majority of respondents responded with agreement, with the highest percentage being for the statement that Mobile JKN supports respondents in obtaining the services they need, with 49 respondents (46.2%). Overall, these results indicate that the majority of respondents perceived real benefits from using Mobile JKN in simplifying, accelerating, and improving the effectiveness of healthcare management.

Table 5. Frequency Distribution of Respondents' Answers on Perceived Usefulness

No	Statement	Benefit	Less Benefit	Mean	Elementary School
1	Mobile JKN provides real benefits in managing my health services.	78 (73.6%)	28 (26.4%)	4.09	0.89
2	Mobile JKN makes it easier for me to prepare documents or requirements before the service.	79 (74.5%)	27 (25.5%)	4.11	0.85
3	Mobile JKN improves my accuracy in getting the right information.	80 (75.5%)	26 (24.5%)	4.14	0.78
4	Mobile JKN allows me to complete service-related work faster.	81 (76.4%)	25 (23.6%)	4.17	0.72
5	Mobile JKN helps me complete health matters faster.	82 (77.4%)	24 (22.6%)	4.18	0.66
6	Mobile JKN helps me organize my service needs in a more structured way.	83 (78.3%)	23 (21.7%)	4.22	0.64
7	Mobile JKN helps me make decisions regarding health services.	83 (78.3%)	23 (21.7%)	4.23	0.63
8	Mobile JKN reduces the obstacles I usually encounter when managing JKN services.	84 (79.2%)	22 (20.8%)	4.26	0.58
9	Mobile JKN supports me in getting the services I need.	84 (79.2%)	22 (20.8%)	4.25	0.60

Source: Researcher Processed Data, 2026

Based on the research results, the majority of respondents considered Mobile JKN to be beneficial in managing healthcare services, with percentages in the benefit category ranging from 73.6% to 79.2%. However, some respondents still hadn't fully experienced the app's benefits.

The highest percentage of perceived lack of benefit was found in the statement "Mobile JKN provides real benefits in managing my healthcare services," at 26.4%, with a mean of 4.09 and a standard deviation of 0.89. This indicates that this statement was the aspect with the lowest perceived benefit by respondents.

Furthermore, the statement "Mobile JKN makes it easier for me to prepare documents or needs before the service" has a percentage of less usefulness of 25.5%, followed by the statement "Mobile JKN increases my accuracy in getting the right information" at 24.5%, and "Mobile JKN makes me able to complete work related to the service faster" at 23.6%.

The lowest percentage of lack of benefits was found in the statements "Mobile JKN reduces the obstacles I usually encounter when managing JKN services" and "Mobile JKN supports me in obtaining the services I need", each at 20.8%.

The highest percentage of benefits was also found in both statements, at 79.2%, with the highest mean values of 4.26 and 4.25, respectively, and standard deviations of 0.58 and 0.60. This indicates that the application's benefits are most felt in terms of ease of service access and assistance in obtaining healthcare.

Overall, the mean score ranged from 4.09 to 4.26, indicating that respondents tended to agree with the usefulness of Mobile JKN. Therefore, it can be concluded that Mobile JKN has a good level of usability, although there are still several aspects that need improvement.

Table 6.Ease of Use Frequency Distribution

Category	n	Percentage (%)
Easy	87	82.1
Difficult	19	17.9
Total	106	100

Source: Researcher Processed Data, 2026

Based on Table 6, the majority of respondents (87 respondents) considered the Mobile JKN application easy to use. Meanwhile, 19 respondents (17.9%) considered the Mobile JKN application difficult to use. These results indicate that the majority of users have a positive perception of the Mobile JKN application's ease of use in accessing various health services.

Table 7. Frequency Distribution of Perceived Ease of Use Questions

No	Statement	Easy	Difficult	Mean	Elementary School
1	I can easily read the contribution and payment information on the billing menu.	81 (76.4%)	25 (23.6%)	4.10	0.88
2	I can find the membership check menu without experiencing any confusion.	83 (78.3%)	23 (21.7%)	4.14	0.80
3	Mobile JKN is easy to learn.	84 (79.2%)	22 (20.8%)	4.17	0.74
4	I can use Mobile JKN without any help from others.	85 (80.2%)	21 (19.8%)	4.19	0.72
5	The online queuing process is easy to do on Mobile JKN.	86 (81.1%)	20 (18.9%)	4.21	0.69
6	The JKN Mobile application runs smoothly on my device.	88 (83.0%)	18 (17.0%)	4.24	0.65
7	I can find the online queue menu easily.	89 (84.0%)	17 (16.0%)	4.28	0.61
8	I can update participant data through the change data feature without any difficulty.	90 (84.9%)	16 (15.1%)	4.30	0.58
9	I can use the JKN Mobile application in various situations without any difficulties.	91 (85.8%)	15 (14.2%)	4.32	0.55

Source: Researcher Processed Data, 2026

Based on the research results, it was found that the majority of respondents considered the Mobile JKN application easy to use, with the percentage of the easy category being in the range of 76.4% to 85.8%.

The highest difficulty percentage, 23.6%, indicates that respondents still face major challenges. Furthermore, difficulty levels of 21.7%, 20.8%, and 19.8% indicate that some respondents still face obstacles in understanding and using the application independently.

The highest percentage of ease of use was 85.8% with the highest mean value of 4.32 and a standard deviation of 0.55, indicating that the majority of respondents considered the application easy to use in various conditions.

Overall, the mean score ranged from 4.10 to 4.32, indicating that respondents tended to agree with the ease of use of Mobile JKN. Therefore, it can be concluded that the Mobile JKN application is relatively easy to use, although some users still encountered some issues.

Table 8.Frequency Distribution of Attitudes Using

Category	n	Percentage (%)
Positive	32	30.2
Negative	74	69.8
Total	106	100

Source: Researcher Processed Data, 2026

Based on Table 8, the majority of respondents (74 respondents (69.8%) had a weak attitude toward using the Mobile JKN application, while 32 (30.2%) had a strong attitude toward using the Mobile JKN application. These results indicate that respondents' attitudes toward using the Mobile JKN application tend to be less than optimal, so efforts are needed to increase user interest and confidence in utilizing the application more actively.

Table 9. Frequency Distribution of Attitude Questions Using

No	Statement	Strong	Weak	Mean	Elementary School
1	I am interested in learning other features in Mobile JKN.	28 (26.4%)	78 (73.6%)	3.27	1.05
2	I want to continue using Mobile JKN in the future.	29 (27.4%)	77 (72.6%)	3.30	1.02
3	I consider Mobile JKN as a practical solution in healthcare services.	30 (28.3%)	76 (71.7%)	3.33	0.98
4	I consider Mobile JKN as a useful application.	31 (29.2%)	75 (70.8%)	3.36	0.94
5	I feel Mobile JKN is better than manual services.	31 (29.2%)	75 (70.8%)	3.35	0.96
6	I have a positive view of Mobile JKN.	32 (30.2%)	74 (69.8%)	3.38	0.93
7	I enjoy the process of using the features in the application.	32 (30.2%)	74 (69.8%)	3.39	0.92
8	I feel satisfied using Mobile JKN.	33 (31.1%)	73 (68.9%)	3.40	0.91
9	I feel Mobile JKN is an important application.	34 (32.1%)	72 (67.9%)	3.44	0.88
10	Using Mobile JKN makes me more satisfied with JKN services.	35 (33.0%)	71 (67.0%)	3.45	0.89

Source: Researcher Processed Data, 2026

Based on the research results, it was found that respondents tended to show weak attitudes and interest in using Mobile JKN. This is evident in the high percentage of those in the weak category, ranging from 67.0% to 73.6%.

The highest percentage of "weak" at 73.6% indicates that many respondents still lack interest in exploring the app further. Furthermore, weak levels of 72.6%, 71.7%, and 70.8% indicate that some respondents also lack a strong desire to continue using the app or view it as an optimal solution.

The lowest weak percentage of 67.0% shows that although the level of weakness is relatively lower compared to other indicators, there are still respondents who have not fully felt satisfied with the use of the application.

On the other hand, the highest percentage of strong attitudes was 33.0% with the highest mean value of 3.45 and a standard deviation of 0.89, indicating that the satisfaction aspect was the part that was most felt by respondents compared to other indicators.

Overall, the mean score ranged from 3.27 to 3.45, indicating that respondents tended to be neutral to agree. Therefore, it can be concluded that attitudes and interest in Mobile JKN are still moderate and need to be improved.

Table 10. Frequency Distribution of Perceived Intention to Use

Category	n	Percentage (%)
Strong	82	77.4
Weak	24	22.6
Total	106	100

Source: Researcher Processed Data, 2026

Based on Table 10, the majority of respondents (82 respondents (77.4%) had a high perception of their intention to use the Mobile JKN application, while 24 respondents (22.6%) had a low perception. These results indicate that the majority of respondents have a strong desire to continue using the Mobile JKN application to access various healthcare services in the future.

Table 11. Frequency Distribution of Questions on Intention to Use

No	Statement	Easy	Difficult	Mean	Elementary School
1	I believe Mobile JKN is important to use in the future.	77 (72.6%)	29 (27.4%)	4.05	0.92
2	I am willing to learn the new features added to Mobile JKN.	78 (73.6%)	28 (26.4%)	4.08	0.88
3	I intend to use Mobile JKN in the future.	80 (75.5%)	26 (24.5%)	4.12	0.82
4	I plan to increase the use of Mobile JKN.	81 (76.4%)	25 (23.6%)	4.14	0.79
5	I am willing to recommend Mobile JKN to others.	82 (77.4%)	24 (22.6%)	4.18	0.73
6	I intend to open Mobile JKN before visiting a health facility.	82 (77.4%)	24 (22.6%)	4.17	0.75
7	I intend to use Mobile JKN to check my membership status.	83 (78.3%)	23 (21.7%)	4.19	0.71
8	I am interested in using Mobile JKN more often than before.	84 (79.2%)	22 (20.8%)	4.20	0.70

9	I will continue to use Mobile JKN even though there are other health applications.	85 (80.2%)	21 (19.8%)	4.23	0.66
10	I want to make Mobile JKN the main service related to JKN.	86 (81.1%)	20 (18.9%)	4.25	0.63

Source: Researcher Processed Data, 2026

The research results revealed that the majority of respondents had positive intentions to use Mobile JKN in the future. This is demonstrated by the high percentage of those in the intention category, ranging from 72.6% to 81.1%.

The highest percentage of no intention, at 27.4%, indicates that some respondents are still not fully convinced of the importance of using the app in the future. Furthermore, the disinterest rates of 26.4%, 24.5%, and 23.6% indicate lingering doubts about their readiness to learn new features and increase app usage.

The lowest percentage of no intention of 18.9% shows that only a small proportion of respondents do not have the desire to make the application their primary service.

The highest percentage of intention was 81.1% with the highest mean value of 4.25 and a standard deviation of 0.63, indicating that most respondents had a strong tendency to make Mobile JKN their primary means of accessing health services.

Overall, the mean score ranged from 4.05 to 4.25, indicating that respondents tended to agree with their intention to use Mobile JKN. Therefore, it can be concluded that their intention to use the app in the future is considered good and quite strong..

Bivariate Test Results Analysis

The Relationship between the Usefulness of the JKN Mobile Application and Actual Use of the JKN Mobile Application

Table 12. Relationship between Perceived Usefulness of the JKN Mobile Application and Actual Use of the JKN Mobile Application

Perceived Usefulness	Use of the JKN Mobile Application				Total	PR	95% CI	P-Value
	Do not use	%	Use	%				
Less Benefit	9	40.9	13	59.1	22	2.02	1.05–3.90	0.045
Benefit	17	20.2	67	79.8	84			
Total	26	24.5	80	69.8	106			

Source: Researcher Processed Data, 2026

Based on Table 12, of the 22 respondents who had a low perception of usefulness, 9 respondents (40.9%) did not use the Mobile JKN application and 13 respondents (59.1%) used the Mobile JKN application. Meanwhile, of the 84 respondents who had a good perception of usefulness, 17 respondents (20.2%) did not use the application and 67 respondents (79.8%) used the Mobile JKN application. The results of the statistical test showed a p-value of 0.045 ($p<0.05$), so there is a significant relationship between the perception of usefulness and the actual use of the Mobile JKN application. The Prevalence Ratio (PR) value of 2.02 (95% CI: 1.05-3.90) indicates that respondents with a low perception of usefulness have a 2.02 times greater risk of not using the Mobile JKN application compared to respondents who have a good perception of usefulness.

The Relationship Between Ease of Use of the JKN Mobile Application and Actual Use of the JKN Mobile Application

Table 13. Relationship between Perceived Ease of Use and Actual Use of the JKN Mobile Application

Perceived Ease of Use	Use of the JKN Mobile Application				Total	PR	95% CI	P-Value
	Do not use	%	Use	%				
Difficult	11	57.9	8	42.1	19	3.36	1.84–6.12	<0.001
Easy	15	17.2	72	82.8	87			
Total	26	24.5	80	69.8	106			

Source: Data processed by researchers, 2026

Based on Table 13, of the 19 respondents who perceived ease of use as less than ideal, 11 respondents (57.9%) did not use the Mobile JKN application and 8 respondents (42.1%) used the Mobile JKN application. Meanwhile, of the 87 respondents who perceived ease of use as good, 15 respondents (17.2%) did not use the application and 72 respondents (82.8%) used the Mobile JKN application. The statistical test results showed a p-value of <0.001 (p<0.05), so there is a significant relationship between perceived ease of use and actual use of the Mobile JKN application. The Prevalence Ratio (PR) value of 3.36 (95% CI: 1.84–6.12) indicates that respondents with perceived ease of use as less than ideal had a 3.36 times greater risk of not using the Mobile JKN application compared to respondents with perceived ease of use as good.

The Relationship Between Attitudes Regarding the Use of the JKN Mobile Application and Actual Use of the JKN Mobile Application

Table 14. Relationship between Attitude of Use and Actual Use of the JKN Mobile Application

Attitude	Use of the JKN Mobile Application				Total	PR	95% CI	P-Value
	Do not use	%	Use	%				
Negative	23	31.1	51	68.9	74	3.31	1.07–10.22	0.017
Positive	3	9.4	29	90.6	32			
Total	26	24.5	80	75.5	106			

Source: Data processed by researchers, 2026

Based on Table 14, of the 74 respondents who had a negative attitude towards the Mobile JKN application, 23 respondents (31.1%) did not use the application and 51 respondents (68.9%) used the Mobile JKN application. Meanwhile, of the 32 respondents who had a positive attitude, 3 respondents (9.4%) did not use the application and 29 respondents (90.6%) used the Mobile JKN application. The results of the statistical test showed a p-value of 0.017 (p<0.05), so there was a significant relationship between the attitude of use and the actual use of the Mobile JKN application. The Prevalence Ratio (PR) value of 3.31 (95% CI: 1.07–10.22) indicated that respondents who had a negative attitude were 3.31 times more likely to not use the Mobile JKN application than respondents who had a positive attitude.

The Relationship Between Intention to Use and Use of the JKN Mobile Application

Table 15. Analysis of the Relationship between Intention to Use and Use of the JKN Mobile Application

Intention	Use of the JKN Mobile Application				Total	PR	95% CI	P-Value
	Do not use	%	Use	%				
Weak	10	41.7	14	58.3	24	2.14	1.12–4.09	0.027
Strong	16	19.5	66	80.5	82			
Total	26	24.5	80	75.5	106			

Source: Data processed by researchers, 2026

Based on Table 15, of the 24 respondents who had weak intentions to use, 10 respondents (41.7%) did not use the Mobile JKN application and 14 respondents (58.3%) used the Mobile JKN application. Meanwhile, of the 82 respondents who had strong intentions to use, 16 respondents (19.5%) did not use the application and 66 respondents (80.5%) used the Mobile JKN application. The

results of the statistical test showed a p-value of 0.027 (p<0.05), so there is a significant relationship between the intention to use and the actual use of the Mobile JKN application. The Prevalence Ratio (PR) value of 2.14 (95% CI: 1.12-4.09) indicates that respondents with weak intentions to use have a 2.14 times greater risk of not using the Mobile JKN application compared to respondents with strong intentions to use.

Discussion

The Relationship between Perceived Usefulness and the Use of the JKN Mobile Application

The results showed a significant relationship between perceived usefulness and actual use of the Mobile JKN application (p-value = 0.045; PR = 2.02; 95% CI: 1.05–3.90). Respondents with poor perceived usefulness were 2.02 times more likely to not use the application than respondents with good perceived usefulness.

Perceived usefulness reflects an individual's belief that using technology can improve performance and provide benefits to its users. The greater the perceived benefits, the greater the likelihood of someone using the application. The results of this study align with those of Prabandari and Ansoriyah (2023), Kurniawan et al. (2023), and Wiratama et al. (2022), which found that perceived usefulness significantly influences application usage. However, these results differ from those of Utami and Rahayu (2022), which found that perceived usefulness did not significantly influence application usage.

Based on observations, some respondents still prefer manual services because they perceive them as more helpful and easier to obtain information directly. This indicates that users have not yet fully experienced the benefits of the application. Researchers assume that the higher the perceived usefulness, the greater the public's tendency to use Mobile JKN. Therefore, BPJS Kesehatan needs to increase public awareness of the application's practical benefits to encourage the public to utilize Mobile JKN optimally.

The Relationship Between Perceived Ease of Use and the Use of the JKN Mobile Application

The results showed a significant relationship between perceived ease of use and actual use of the Mobile JKN application (p-value = 0.000; PR = 3.36; 95% CI: 1.84–6.12). Respondents with poor perceived ease of use were 3.36 times more likely to not use the application than respondents with good perceived ease of use.

Perceived ease of use is defined as the belief that a technology is easy to understand, learn, and operate without significant effort. Ease of use is a crucial factor in increasing application satisfaction and usage. The results of this study align with those of Hanafi et al. (2023), Kurniawan et al. (2023), and Atqiyah and Sutisna (2025), which found that perceived ease of use significantly influences application usage.

Observations showed that some respondents still needed assistance from family or healthcare workers when using Mobile JKN, especially during registration and when using certain features. Respondents who did not use the app also admitted to not understanding how to use it. Researchers assume that the easier the app is to use, the higher the usage of Mobile JKN. Therefore, BPJS Kesehatan is advised to continue simplifying the app's interface, clarifying service flows, and providing user-friendly user guides.

The Relationship Between Attitudes Towards Use and Use of the JKN Mobile Application

The results showed a significant relationship between attitudes toward use and actual use of the Mobile JKN application (p-value = 0.017; PR = 3.31; 95% CI: 1.07–10.22). Respondents with negative attitudes had a 3.31 times greater risk of not using the application compared to respondents with positive attitudes.

Attitude toward use is a person's positive or negative evaluation of technology use. Attitudes are formed from user experience, perceived usefulness, and ease of use of the application. The results of this study align with those of Rani (2022), Dharmawan et al. (2023), and Sahbani et al. (2025), which found that attitude significantly influences application use.

Based on observations, some respondents still prefer in-person services because they can interact directly with health workers. This indicates a less than positive attitude toward Mobile JKN.

Researchers assume that positive attitudes will increase app usage, while negative attitudes will hinder technology adoption. Therefore, improvements to the app's quality and user experience are necessary to foster a more positive public attitude toward Mobile JKN.

The Relationship Between Intention to Use and Use of the JKN Mobile Application

The results showed a significant relationship between intention to use and actual use of the Mobile JKN application (p-value = 0.027; PR = 2.14; 95% CI: 1.12–4.09). Respondents with weak intention to use had a 2.14 times greater risk of not using the application compared to respondents with strong intention to use.

Intention to use is an individual's tendency to use technology continuously and is a major factor influencing actual application usage. This intention is formed from user experience, perceived usefulness, ease of use, and user attitudes toward the application. The results of this study align with those of Prabandari and Ansoriyah (2023), Desala et al. (2025), and Nurhayati and Shiddieq (2025), which found that intention to use significantly influences application usage.

Observations indicate that some respondents still maintain the habit of using manual services at healthcare facilities. This low intention to use the app is influenced by a lack of understanding, limited technological capabilities, and the perception that manual services are more practical. Researchers assume that the high intention to use indicates public awareness of the importance of digital healthcare services. Therefore, BPJS Kesehatan needs to improve the quality of the app and the user experience to ensure that intention to use translates into actual, ongoing use.

CONCLUSION

This study shows that the use of the Mobile JKN application in Rupit District, North Musi Rawas Regency is significantly influenced by perceived usefulness, perceived ease of use, attitude to use, and intention to use the application. Most respondents have used Mobile JKN and considered the application useful and easy to use in accessing health services. The results of the bivariate test showed that respondents with low perceived usefulness, low perceived ease of use, negative attitudes, and weak intention to use have a greater risk of not using the Mobile JKN application. The ease of use factor is the most dominant variable with the highest PR value, indicating that ease of understanding and operating the application greatly determines the actual use of Mobile JKN. This finding strengthens the Technology Acceptance Model (TAM) theory that perceived usefulness and ease of use play a role in shaping attitudes, intentions, and behavior in using digital health technology.

This study has limitations due to its cross-sectional design, which means the relationships found cannot fully explain cause and effect. Furthermore, the study was conducted only in Rupit District with a limited sample size, so the results cannot be generalized to other regions. Data collection through questionnaires also poses a potential bias due to the subjectivity of respondents' responses. Therefore, further research is recommended to use a longitudinal or mixed methods design with a wider coverage area and include other variables such as trust, system quality, digital literacy, and social support. Practically, the results of this study can serve as a basis for BPJS Kesehatan and healthcare facilities to improve outreach, digital education, simplify features, and strengthen support for application use to optimize and equitably utilize Mobile JKN in rural areas.

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