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USER ACCEPTANCE OF MOBILE-JKN: INSIGHTS FROM THE TECHNOLOGY ACCEPTANCE MODEL

Penerimaan Aplikasi Mobile-JKN: Perspektif dari Model Penerimaan Teknologi

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Abstract

Background: Technological advancements in healthcare have driven BPJS Kesehatan Indonesia to develop the Mobile JKN application to enhance accessibility, efficiency, and quality of services. Despite its potential benefits, the implementation of this application faces various challenges, such as application errors, differing levels of digital literacy, and data security issues, necessitating an evaluation of its adoption and acceptance.
Aims: To analyse the public acceptance of Mobile JKN based on the Technology Acceptance Model (TAM) variable while also exploring user experiences towards the application.
Methods: A descriptive-analytical approach with a cross-sectional design. Data were collected through a questionnaire developed based on the TAM model, involving 406 respondents across Indonesia. Data analysis was performed using a regression linear test with SPSS after all basic assumptions were met.
Results: Perceived Ease of Use, Perceived Usefulness, and Attitude Toward Use individually and simultaneously impact Actual System Use (Sig. 0.000; R-Square 0.827). Respondents generally answered “Agree” to all TAM indicators, with mean scores of 4.20 for Perceived Usefulness, 4.16 for Perceived Ease of Use, 4.25 for Attitude Toward Use, and 4.33 for Actual System Use. Most users accessed the app through self-access (48%), frequently used features were membership information (28%), and encountered issues such as application errors (25%).
Conclusion: The app was deemed relevant, accurate, easy to use, and beneficial. To enhance public acceptance, BPJS Kesehatan should focus on developing a user-friendly Mobile JKN app by incorporating key TAM factors, optimizing popular features, improving technical stability, and regularly addressing user feedback to ensure effective health administration and service delivery.

Keywords: Adoption, Application, BPJS Kesehatan, Mobile JKN, TAM

Abstrak

Latar Belakang:*Kemajuan teknologi dalam bidang kesehatan telah mendorong BPJS Kesehatan Indonesia untuk mengembangkan aplikasi Mobile JKN guna meningkatkan aksesibilitas, efisiensi, dan kualitas layanan. Meskipun memiliki manfaat potensial, pelaksanaan aplikasi ini menghadapi berbagai tantangan, seperti eror aplikasi, perbedaan tingkat literasi digital, dan masalah keamanan data, sehingga perlu adanya evaluasi terhadap adopsi dan penerimaan dari aplikasi ini.*
Tujuan: *Menganalisis penerimaan masyarakat terhadap aplikasi Mobile JKN berdasarkan variabel TAM juga mengeksplorasi pengalaman pengguna terhadap aplikasi tersebut.*
Metode: *Pendekatan deskriptif-analitik dengan desain cross-sectional. Data dikumpulkan melalui kuesioner yang dikembangkan berdasarkan model TAM, melibatkan 406 responden di seluruh Indonesia. Analisis data dilakukan dengan uji regresi linier menggunakan SPSS setelah semua asumsi dasar terpenuhi.*
Hasil: *Perceived Ease of Use, Perceived Usefulness, dan Attitude Toward Use, baik secara individu maupun simultan, mempengaruhi Actual System Use (Sig. 0.000; R-Square 0.827). Responden umumnya menjawab “Setuju” untuk semua indikator TAM, dengan skor rata-rata 4.20 untuk Perceived Usefulness, 4.16 untuk Perceived Ease of Use, 4.25 untuk Attitude Toward Use, dan 4.33 untuk Actual System Use. Sebagian besar pengguna mengakses aplikasi melalui akses mandiri (48%), fitur yang paling sering digunakan adalah informasi keanggotaan (28%), dan masalah yang dihadapi adalah kesalahan aplikasi (25%).*
Kesimpulan: *Aplikasi ini dianggap relevan, akurat, mudah digunakan, dan bermanfaat. Untuk meningkatkan penerimaan publik, BPJS Kesehatan harus mengembangkan aplikasi yang ramah pengguna dengan mempertimbangkan faktor TAM, mengoptimalkan fitur populer, meningkatkan stabilitas teknis, dan rutin menanggapi umpan balik pengguna untuk memastikan efektivitas dari administrasi dan pelayanan kesehatan.*

Kata kunci*: Adopsi, Aplikasi, BPJS Kesehatan, Mobile JKN, TAM*

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Introduction

Technological advancements have significantly transformed the healthcare landscape, offering new avenues for streamlining operations and improving patient outcomes (Okolo *et al.*, 2024). In line with these developments, BPJS Kesehatan Indonesia introduced the Mobile JKN application in 2017 (Khotimah, 2022) aiming to enhance service efficiency for users. The application facilitates key processes such as registration, data updates, access to information, payment verification, and healthcare service navigation. Furthermore, it allows users to submit suggestions or complaints, while also providing a digital JKN card when the physical one is unavailable (Lumi *et al.*, 2023).

Mobile health apps such as Mobile JKN are integral to the management of today's health care system for patients and health care providers alike. These include improved availability, better data utilisation, and greater operational efficiency (Gordon *et al.*, 2020). As digital solutions become more integral in the healthcare industry, the ability to successfully utilise mobile apps are imperative for streamlining administrative processes, optimising workflows, and ensuring accessibility and efficacy of services. This integration advances the objectives of health policy, which are to improve administrative efficiency and care quality.

However, there are also several challenges to the implementation of mobile health applications. Typical problems include complex registration processes, difficult interface navigation, minimal usage in rural areas (Syahputro *et al.*, 2024), sluggish complaint response, frequent system errors (Siregar, Ismah and Hasibuan, 2024), problems with the login process, and continual worries about data security (Syamsul, Amri and Siregar, 2022). These issues show that the Mobile JKN application needs further evaluation. This research will focus on three main aspects user attitudes, perceived usefulness, and ease of use in order to assess the public acceptance of the Mobile JKN application.

Past research has assessed the utilisation of Mobile JKN using several different methods (Nurul Jannah *et al.*, 2023; Pratama, Ridwandodo and Amini, 2021; Harsono, Sugiharto and Rinayati, 2021). But this research takes another approach by including respondents from all over Indonesia and focusing on perspective of the general public. The main framework for evaluating technology acceptability is the Technology acceptability Model (TAM), that employs constructs such as perceived usefulness, perceived ease of use, attitude toward using, and their relationship to actual system use.

The primary basis for the choice of TAM over other acceptance theories, like the Unified Theory of Acceptance and Use of Technology (UTAUT) lies simply in its simplicity and direct applicability to the user in question (Davis and Granić, 2024). TAM provides a simple model that reflects users' perceptions of the technology being introduced and the model has previously proven to have a high predictive power on issues of usage intention and would be useful in analysing technology adoption particularly in a diverse context such as Indonesia (Kurniabudi, Assegaff and Sharipuddin, 2014). Furthermore, TAM's flexibility enables it to be customised to particular behavioural and cultural quirks, which is essential in regional contexts where individual viewpoints could predominate over social effects. On the other hand, even though UTAUT is all-inclusive, it works best in organisational settings where social elements like social influence and favourable circumstances are important (Venkatesh, Thong and Xu, 2012). Thus, TAM is still a good option for studies on technology adoption in this situation. While perceived ease of use indicates the anticipation that a technology would make jobs easier, perceived usefulness indicates that a technology will increase efficiency (Davis and Granić, 2024). An application that is easy to use, improves efficiency, and provides greater benefits to productivity (Trisna, Daniati and Sari, 2020). Positive user attitudes significantly influence actual usage and adoption of the application (Rohman, Mukhsin and Ganika, 2023). Actual usage

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measures the extent to which the technology is truly accepted and utilised (Nugroho, Notobroto and Rosyanti, 2021). By focusing on these variables, this study aims to assess public acceptance of the Mobile JKN application utilising TAM variable while also explore user experiences related to application. The Mobile JKN is expected to simplify administrative processes in Indonesia's healthcare system, including service registration and other related tasks. Ultimately, this evaluation seeks to improve the efficiency and effectiveness of service delivery to the public.

Method

Research Variable and Hypothesis

The research employed descriptive-analytical method with a cross-sectional approach. The variables used in this study include independent variables such as Perceived Usefulness (PU), Perceived Ease of Use (PEU), and Attitude Toward Using (ATU), and the dependent variable, Actual System Use (AU). The research hypotheses are: PEU has a positive and significant effect on PU; PU has a positive and significant effect on ATU; PEU has a positive and significant effect on ATU; ATU has a positive and significant effect on AU; and PEU, PU, and ATU have a positive and significant effect on AU.

Research Sample

Preliminary studies by Syamsul, Amri and Siregar (2022) indicate that the number of Mobile JKN users in Indonesia in 2022 was 16,346,826. Sample size calculations were performed using the Slovin formula (Santoso, 2023), resulting in a minimum sample size of 400 respondents. The respondents will include the entire population from all regions of Indonesia. Inclusion criteria are including individuals aged 18 and over, who are registered as BPJS Kesehatan participants and have the Mobile JKN application. Exclusion criteria include respondents who did not complete all questions in the questionnaire or were unable to access the questionnaire.

Research Instrument

This study utilised an online questionnaire as the research instrument, distributed widely to public through social media platforms such as Instagram, X, WhatsApp and Facebook. The questionnaire was developed based on the theoretical foundation of TAM by Fred D Davis and was adapted and modified by the researchers tailored to the Mobile JKN application. The questionnaire consists of a total of 27 questions categorised into four key variables: PU with 6 questions, PEU with 6 questions, ATU with 5 questions, and AU with 2 questions. Each question assesses specific indicators related to these variables, such as relevance, accuracy, and usability. The measurement scale used is the Likert scale, ranging from 1 to 5 with the following categories: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5).

The modified questionnaire then tested for both validity and reliability to ensure its effectiveness in measuring the intended constructs. The validity tests include face validity and content validity. Face validity was conducted with 30 random respondents using Pearson Product Moment correlation by comparing the calculated item-total correlations (R-value) with the critical value (r-table). The question is considered valid if the computed r value is positive and higher than the r table (Darma, 2021). Professionals having knowledge of the research problem assessed the content validity (Cabatan, Grajo and Sana, 2020), including specialists in social pharmacy with experience in developing questionnaires and personnel of BPJS Kesehatan who familiar with Mobile JKN field practices. The validity calculation including Item Content Validity Index (I-CVI), Scale Content Validity Index Average (S-CVI/Ave), Scale Content Validity Index Universal Agreement (S-CVI/UA), Content Validity Ratio (CVR), and Content Validity Index (CVI) (Suryadi *et al*., 2023; Yusoff, 2019). Cronbach's Alpha was used to evaluate the reliability; an item is deemed reliable if its Cronbach's Alpha value is higher than 0.6 (Amirrudin, Nasution and Supahar, 2020).

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Data Analysis

The gathered data was presented using descriptive analysis in a more organised manner, like tables or graphs, to aid comprehension. Data were grouped according to respondent attributes such age, gender, occupation, residence, and educational level. SPSS software was used to analyse quantitative data, including tests for heteroscedasticity, multicollinearity, and normality as well as hypothesis testing with linear regression (Darma, 2021).

Result and Discussion

Research Instrument Validity & Reliability Results

According to Yusoff (2019), there are six steps involved in content validity include: (1) Develop the content validity form, (2) Select the expert panel for validation, (3) Request the expert to assess relevance for every item, (4) Examine each item and domain, (5) Score every item, and (6) Calculate the validity score (I-CVI, S-CVI/Ave, S-CVI/UA, CVR, and CVI). The content validity form is divided into four sections: (1) Validator identity, (2) Research introduction, (3) Instructions for completion and scoring, and (4) The actual assessment form with a 5-point Likert scale. Validators were selected according to certain criteria, such as at least a master's degree, familiarity with health social research, and previous experience in relevant field (Yusoff, 2019). Ten validators from two organisations: six from BPJS Kesehatan and four from universities-participated.

Validators provided qualitative feedback on grammar, word choice, sentence structure, content, and relation to the research variables. Accordingly, the most effective format was derived from the questionnaire, and this became the instrument used in the study. The content validity test results show that the I-CVI value is ≥ 0.900, indicating that these items are valid (a CVI value > 0.79 indicates relevance, 0.70-0.79 requires revision, and < 0.70 should be removed or revised) (Jeldres, Costa and Nadim, 2023; Yusoff, 2019). All CVR values are ≥ 0.800 (item with values < 0.800 need to be either removed or revised) (Jeldres, Costa and Nadim, 2023). An S-CVI value > 0.90 indicates excellent content validity (Cabatan, Grajo and Sana, 2020; Yusoff, 2019). The final calculation results showed an S-CVI/Ave of 0.99 (99% evaluator agreement) and an S-CVI/UA of 0.96 (96% of items approved). The CVI value is 0.99, indicating very high content validity.

Face validity test results indicated that all items in the instrument had a calculated R-value greater than the table R-value (0.361), meaning all items were considered valid. A high R-value, such as the 0.843 for item PEU4, suggests that the item is very effective in measuring the intended construct (Okwonu, Asaju and Arunaye, 2020). Reliability test results show that the obtained Cronbach Alpha value was 0.934 (> 0.60) indicating that the questionnaire instrument has excellent reliability with high internal consistency and stable results when used repeatedly.

Research Respondent Demography

This study involved 406 respondents from diverse demographic backgrounds across Indonesia, all of whom consented to participate. Demographic data such as residence, age, gender, occupation, and education level were collected. Respondents were selected from six main island of Indonesia: Sumatra, Java, Bali/ East Nusa Tenggara (NTT)/ West Nusa Tenggara (NTB), Sulawesi/ Maluku, Kalimantan, and Papua (Table 1), representing a broad range of socio-cultural characteristics.

Table 1. Geographical Distribution of Research Respondents

No	Regions	Total	%
1	Java	100	25
2	Sumatera	82	20
3	Kalimantan	74	18
4	Bali/ NTT/ NTB	59	15
5	Sulawesi/ Maluku	57	14
6	Papua	34	8
	Total	406	100

In Indonesia, where remote areas face significant healthcare delivery challenges, health policy must emphasize the integration of technology to enhance

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access and efficiency. According to data from the Central Statistics Agency (BPS) Indonesia in mid-2024, Java Island dominated the geographical distribution with 156 million people, approximately 56% of the total population (BPS, 2024). Java being the economic and governmental centre, plays a significant role in this study, with 25% of respondents from this region. Sumatra, the second most populous island with 61.5 million people contributed 20% of the respondents. Bali/ NTT/ NTB region accounted for 15%, followed by Sulawesi & Maluku with 14%, and Kalimantan with 18% of respondents. Remote regions like Papua, with a population of 5.7 million, contributed only 8% of respondents.

The number of respondents was not strictly calculated proportionally to the percentage of the Indonesian population; while we aimed to include representation from various regions, the distribution reflects a balance between population size and practical considerations for data collection. This approach captures diverse experiences across the main islands, acknowledging the challenges of reaching remote areas, and highlights the critical need for health policies that prioritise digital solutions to improve healthcare delivery in these underserved areas.

Research Respondent Characteristics

The majority of respondents in this study are female (60%) (Table 2) which may have been influenced by the sampling method, conducted online via social media. The 2023 National Socio-Economic Survey (Susenas) by BPS indicates that 76.23% of social media users are female, compared to 75.87% male users. Additionally, the social role of women, who are often responsible for managing family health may have contributed to the predominance of female respondents. The early adult group tends to be more adaptive to new technologies due to their active career and social life phases, and their high level of technological literacy (Davis and Granić, 2024). In converse, while adolescents have high digital literacy, only 19% of them participated in this study, likely due to their less frequent need for health services compared to older age groups. Late adults and seniors represent a smaller percentage, facing challenges in adopting technology such as complexity and lower self-confidence in operating mobile health applications, although their motivation to use such technology increases with age and growing awareness of health risks (Kwak *et al.*, 2020).

Table 2. Characteristics of Research Respondents

Description	Total	%
Gender		
-Man	162	40
-Woman	244	60
Age		
-Teenage (18-25 yr)	76	19
-Young Adult (26-35 yr)	262	64
-Adult (36-45 yr)	46	11
-Elderly (>46 yr)	22	5
Education		
-Junior / High School	44	11
-D1/D2/D3	27	7
-Bachelor	268	66
-Magister	64	16
-Doctoral	3	1
Occupation		
-Students	50	12
-Military/Civil Servants/ Police	99	24
-Employee	154	38
-Self-Employed	51	13
-Others	52	13
Total	406	100

Most respondents have higher education, with 66% holding a bachelor's degree and 17% holding a postgraduate degree (Masters and Doctoral). Higher education levels tend to enhance individuals' ability to adopt new technologies and their expectations regarding the features and functions of technological applications (Liu, Geertshuis and Grainger, 2020). Occupation also affects attitudes toward technology adoption. For example, employees (38%) who are frequently exposed to digital technology at work are more likely to adopt mobile health applications. Meanwhile, students (12%) and entrepreneurs (13%) have different characteristics. Students are often exposed to the latest technologies during their education, but time and

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financial constraints may limit their optimal use of health applications (Ubaidillah *et al.*, 2020). Entrepreneurs need health solutions that are conveniently accessible and flexible enough to accommodate their erratic but flexible schedules (Putro and Takahashi, 2024). Other groups, such housewives, physicians, educators, lecturers, and jobless people, have different requirements and preferences when it comes to the Mobile JKN app.

Overall, these results highlight how important it is to take demographic diversity into account when deploying mobile health apps like Mobile JKN. Health officials can create strategies that appeal to each demographic segment by acknowledging the unique needs and characteristics of different groups, including gender, age, occupation, and educational attainment. In the end, a careful approach to policymaking will guarantee that digital health solutions are useful, pertinent, and accessible to all facets of Indonesian society, enhancing the quality and outcomes of healthcare as a whole (Handayani *et al.*, 2018)

Descriptive Results of Mobile JKN Adoption and User Experience

The majority of users (48%) downloaded the Mobile JKN application on their own using the App Store or Play Store. Besides self-access, recommendations from healthcare professionals and from BPJS Kesehatan also the other primary sources of application adoption. The most frequently used feature is "Participant Information" (28%), followed by "Participant Data Changes & Healthcare Facility Changes" (22%) and "Health Service Queue Registration" (21%). The data could be seen in Figure 1.

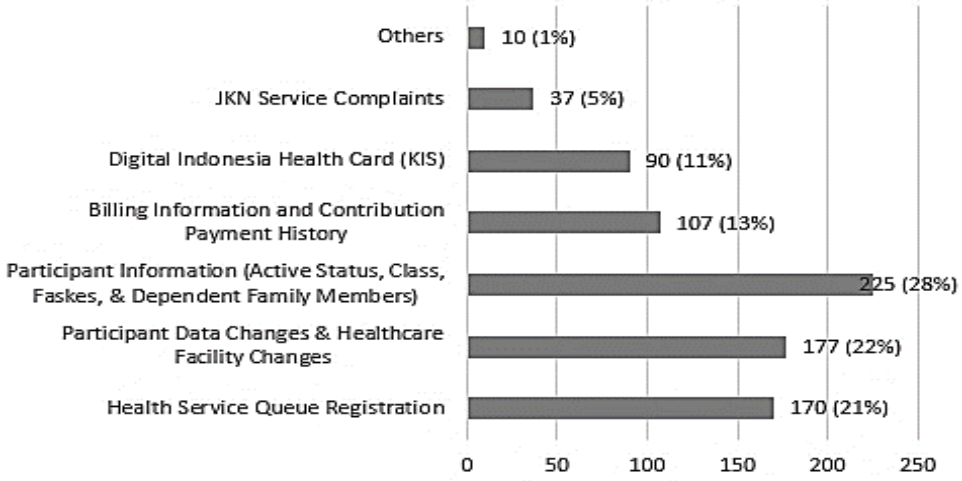

Figure 1. Most Frequently Accessed and Used Features on Application

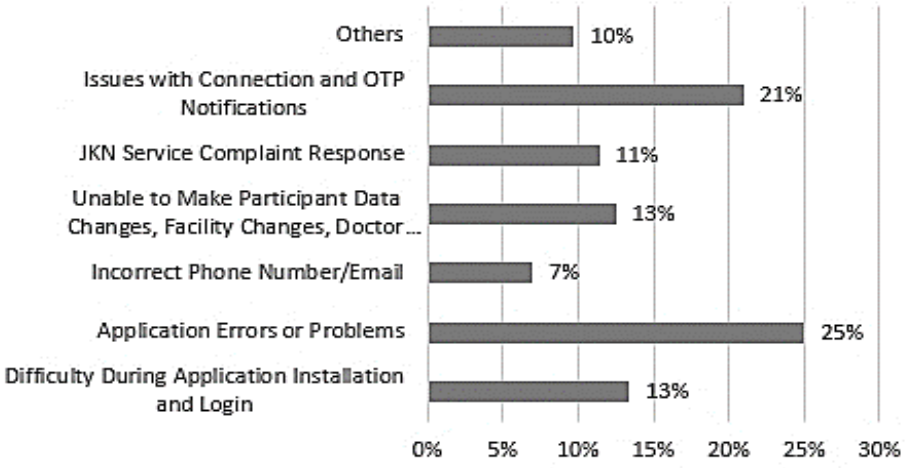

Figure 2. Problems Experienced When Accessing Applications

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This data shows that participant data and administrative features are in high demand. These features facilitate healthcare staff to focus more on important aspects of patient care, which reduces administrative burdens and improves operational efficiency for BPJS Kesehatan and healthcare facilities. Thus, reducing bureaucratic delays and streamlining administrative procedures using digital platforms, Indonesia's healthcare system could provide better overall service delivery (Darusalam *et al.*, 2023). While it is a very convenient, the Mobile JKN app has some serious technical difficulties. The primary issue reported is "Application Errors or Problems" (25%), followed by "Connection Issues and OTP Notifications" (21%) (Figure 2).

These technical difficulties not only impact user experience but also pose administrative challenges. Persistent application errors and connectivity issues disrupt the seamless operation of healthcare services, leading to delays in essential administrative tasks. Addressing these technical problems is crucial for improving the functionality and reliability of the Mobile JKN application, ensuring it meets user expectations and supports effective healthcare management.

A significant portion of respondents (42.9%) strongly agree that the Mobile JKN application simplifies obtaining comprehensive information about participation, healthcare services, billing, and BPJS Kesehatan programs. This ease of access is especially crucial in Indonesia, where disparities in healthcare utilisation are influenced by complex individual characteristics and geographic barriers that can hinder physical access to services (Mahmudiono and Laksono, 2021). Additionally, 44.8% of respondents find the application flexible and easy to use, providing on-demand access to healthcare services anytime and anywhere. This level of convenience aligns with the goals of national health administration, particularly in addressing the availability, accessibility, and acceptance of healthcare services, which are critical challenges in implementing the national health insurance system (JKN) in Indonesia. (Wenang *et al*., 2021).

Hypothesis test Results with SPSS

In multiple linear regression tests, basic assumption such as normality, multicollinearity, and heteroscedasticity must be met to strengthen the validity of statistical inferences (Darma, 2021). All significance values are greater than 0.05, confirming that these fundamental assumptions were satisfied (Table 3).

Table 3**.** Normality, Multicollinearity, and Heteroscedasticity Test Result

Var	Sig.	Tolerance	VIF	Sig.
PU	0,129	0,327	3,058	0,051
PEU	0,137	0,337	2,966	0,285
ATU	0,152	0,408	2,451	0,405
AU	0,229	-	-	-

After the basic assumption were met, hypothesis testing using regression analysis was conducted (Figure 3). This analysis aimed to test the research hypotheses by evaluating the partial and simultaneous effects of the independent variables on the dependent variable. The results of the first hypothesis test show that PEU has a positive and significant effect on PU with significance value of 0.000 (<0.05). According to the R Square value of 0.785, PEU accounts for 78.5% of the variability in PU. That shows a really strong correlation between the two, which supports the theory of TAM which says that if users find a technology is easy to use, they are more likely to think it is useful and will be beneficial to them, so this ease of use is a key factor in increasing the perceived benefits of the application (Kalayou, Endehabtu and Tilahun, 2020). That's in line with the TAM theory that ease of use is one of the most important factors in the perception of technology benefits (Davis and Granić, 2024), and just goes to show that health applications must be user friendly in order to make them seem more useful and effective in health administration.

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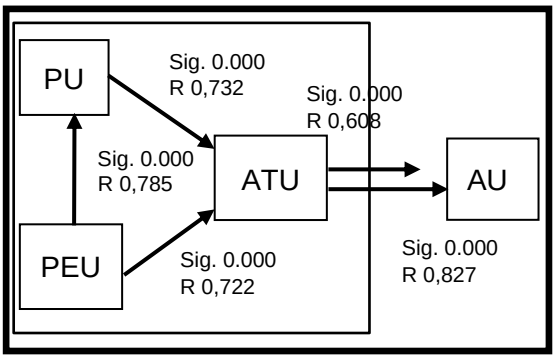

Figure 3. Research Hypothesis Results

According to the results of the second hypothesis test, PU significantly and favourably affects ATU, with a significance value of 0.000 (<0.05) and a R Square value of 0.732. This indicates that the perception of the application's utility accounts for about 73.2% of the difference in user opinions. These findings also align with the findings that state that perceived usefulness is one of the most significant predictors of intention to continue use of health technology (Ahmad *et al.*, 2020). Users seems to enjoy the application a lot more when they fell like they are getting something unique out of it. It seems the more useful the application is to people the more they tend to trust it and with that trust they are more likely to explore the application (Ahmad *et a*l., 2020).

The third hypothesis test shows that PEU has a positive and significant influence on ATU, with a sig. With a p value of 0.000 <0.05) and a R Square value of 0.722. So, the ease of use of the application explains about 72. Better user attitudes would be brought about by applications possessing an intuitive user interface (Kalayou, Endehabtu and Tilahun, 2020).

The fourth hypothesis test results, which have a significance value of 0.000 (<0.05) and a R Squared value of 0.782, demonstrate that ATU has a positive and substantial impact on AU. This result shows that user attitudes cause 78.2% of the variation in using application. From the standpoint of health management, these results emphasise how crucial it is to promote satisfying user experiences in order to increase the efficacy of digital health platforms. By guaranteeing that users can obtain necessary services promptly, an application that is easy to use and promotes good attitudes can result in more frequent and extensive use, which in turn supports improved administration and delivery of health care (Nadal, Sas and Doherty, 2020).

The result of the fifth and last hypothesis demonstrate that every independent variable simultaneously and collectively affects how the Mobile JKN application is really used. ANOVA sig. value 0.000 (<0.05) and R value 0.827 indicate that the variation in application utilisation caused 82.7% by all of the three independent variables. From the regression equation, each of the independent variable affects significantly the usage of the application. The use of health technology is affected at the same time by its usefulness, user's attitude, and ease of use (Nadal, Sas and Doherty, 2020).

This research serves as a preliminary exploration of the Mobile JKN app community acceptance. If the results indicate that the program is being utilised in a favourable light, then it can be furthered to encompass additional healthcare services. Taking inspiration from apps like My Health Records (Australia) and the NHS App (UK), which offer numerous medical functions such as making appointments, virtual appointments, and having the ability to view medical records (KC *et al.*, 2023), Mobile JKN could make it easier for users to access a variety of medical services and manage their health in general. These findings suggest that developers of applications need to follow a holistic approach to motivate users to use the application more effectively and for a longer period of time. This in turn would make for better service all around because there would be more user input and more efficient health administrative processes. If it is used extensively, Mobile JKN can be a "one-stop" application that provides various kinds of health services without the need of many digital applications.

In conducting this research, the researcher that there may be several limitations. Such as, because the study was carried out online using Google Forms, only

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people who could access and use the survey were able to participate, even though the sample is geographically representative. This may overlook the perspectives of individuals who are less familiar with technology or have limited internet access, especially in remote areas with inadequate digital infrastructure. Future research could consider data collection methods that reach populations with limited digital access.

Conclusion

Public acceptance of the Mobile JKN application is significantly influenced by user attitudes (ATU), while ATU itself is strongly affected by PU and PEU. Therefore, a holistic approach is essential for enhancing acceptance and adoption. BPJS Kesehatan should focus on features that effectively showcase the application's benefits while creating a user-friendly interface to improve the overall user experience. Moreover, streamlining authentication processes and regularly assessing user feedback will be crucial for maintaining the app's effectiveness. By addressing these interconnected factors and promoting positive user experiences, BPJS Kesehatan can greatly enhance public acceptance and position Mobile JKN as a comprehensive solution for various healthcare services, ultimately improving health service delivery within Indonesia's healthcare system.

Abbreviations

TAM: Technology Acceptance Model; PU: Perceived Usefulness; PEU: Perceived Ease of Use; ATU: Attitude Toward Use; AU: Actual System Use; BPJS: *Badan Penyelenggara Jaminan Sosial*; JKN: *Jaminan Kesehatan Nasional* / NHI: National Health Insurance).

Declarations

Ethics Approval and Consent Participant

This research has received ethical permission from the UGM FKKMK Ethics Commission with permit number: KE/FK/0813/EC/2024. Participants have given written consent to participate in the study.

Conflict of Interest

The Authors declares that there is no conflict of interest.

Authors' Contribution

FSD constructed the study concept and proposed the methodology; AWW and CW drafted, edited, and revised the text; and FSD wrote the first draft.

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