

## Driving User Satisfaction and Purchase Intention of Mobile Health Applications: Evidence from Indonesian Hospitals

Angelica Shania Dani Putra Benjamin<sup>1\*</sup>, Novika Candra Astuti<sup>2</sup>

<sup>1\*,2</sup> School of Business and Management, Institut Teknologi Bandung, Indonesia.

Corresponding Email: [angelicashania3@gmail.com](mailto:angelicashania3@gmail.com)<sup>1\*</sup>

**Abstrak.** Transformasi digital di sektor kesehatan Indonesia berkembang pesat, namun penggunaan aplikasi rumah sakit masih tertinggal dibandingkan platform agregator kesehatan. Studi ini bertujuan untuk menganalisis faktor-faktor yang memengaruhi kepuasan pengguna dan dampaknya terhadap niat berkelanjutan dan niat pembelian untuk layanan Pemeriksaan Kesehatan (MCU). Dengan mengintegrasikan model UTAUT dan DeLone & McLean IS Success, data dikumpulkan dari 206 responden yang menggunakan aplikasi MySiloam dan MIKA di wilayah Jakarta Raya, dan dianalisis menggunakan metode PLS-SEM. Hasil menunjukkan bahwa kualitas informasi, kemudahan penggunaan, kualitas layanan, dan pengaruh sosial merupakan prediktor signifikan terhadap kepuasan pengguna. Sebaliknya, aspek teknis seperti kualitas sistem dan kondisi fasilitas tidak memiliki pengaruh signifikan, menunjukkan fenomena faktor higienis. Kepuasan pengguna terbukti menjadi mediator penuh yang krusial dalam mendorong niat berkelanjutan dan niat pembelian. Niat berkelanjutan juga bertindak sebagai mediator bagi kepuasan untuk memengaruhi niat pembelian. Dari segi implikasi manajerial, rumah sakit disarankan untuk mengarahkan kembali investasi dari infrastruktur teknis ke penguatan konten medis, kemudahan penggunaan, dan responsivitas layanan untuk menciptakan pengalaman pasien yang berpusat pada kepuasan demi keberlanjutan bisnis jangka panjang.

**Kata kunci:** Aplikasi Kesehatan Seluler; UTAUT; DeLone dan McLean; Kepuasan; Niat Pembelian.

**Abstract.** Digital transformation in the Indonesian healthcare sector is progressing rapidly, but hospital app usage lags behind the health aggregator platforms. This study aims to analyze the factors influencing user satisfaction and its impact on continuance intention and purchase intention for Medical Check-Up (MCU) services. By integrating the UTAUT and DeLone & McLean IS Success models, data was collected from 206 respondents who used the MySiloam and MIKA apps in the Greater Jakarta area, and was analyzed using the PLS-SEM method. The results show that information quality, ease of use, service quality, and social influence are significant predictors of user satisfaction. Conversely, technical aspects such as system quality and facility conditions did not have a significant effect, indicating a hygiene factor phenomenon. User satisfaction proved to be a crucial full mediator in driving continuance intention and purchase intention. Continuance intention also acts as mediator for satisfaction to influence purchase intention. For managerial implications, hospitals are advised to reorient investments from technical infrastructure to strengthening medical content, ease of use, and service responsiveness to create a satisfaction-centered patient experience for long-term business sustainability.

**Keywords:** Mobile Health Apps; UTAUT; DeLone and McLean; Satisfaction; Purchase Intention.

## Introduction

Digital transformation has revolutionized the healthcare sector through the emergence of mobile health apps that enable seamless access to services, from doctor appointments to self-service medical record access. Post-COVID-19 changes in consumer behavior have reinforced this trend, with digital access as a crucial part for the patient healthcare journey. This potency is reflected through the Indonesian e-health market that reached US\$3.5 Billion in 2024, with the projection of 8.38% compound annual growth rate (CAGR) by 2030 (Nexdigm, 2024). In Indonesia, the healthcare app ecosystem is divided into three main categories: hospital apps (such as MySiloam and MIKA), aggregators (such as Halodoc), and preventive/wellness apps. Hospital-owned apps offer a strategic advantage in the depth of patient data integration and continuity of care. For hospitals, digitalization is not simply a support tool but a strategic priority for operational efficiency, customer lifecycle management, and increasing repeat booking rates.

However, despite its significant potential, hospital app adoption still faces significant challenges. There is a significant gap between the number of monthly active users (MAUs) of health aggregators, which reach millions, compared to large hospital apps like MySiloam (250,000 MAUs) and Mitra Keluarga (150,000 MAUs) (Data AI, 2024). Key issues include uninstall rates reaching 70% per month, stagnant active user growth (0.1% month-on-month), and low transaction conversion rates for high-value services like Medical Check-Ups (MCUs). This low purchase intention is evident in data showing that only 5% of users indicated transaction intention (selecting a schedule) after accessing the MCU menu (Source: Internal data from one of well-known hospitals in Greater Jakarta, 2025). This issue is caused by a lack of in-depth understanding of how user satisfaction factors can influence continuance intention and purchase intention. Therefore, this study aims to integrate the Unified Theory of Acceptance and Use of Technology (UTAUT) and the DeLone & McLean Information System Success Model as a

comprehensive framework to identify the drivers of user satisfaction from user behavioral and technicality aspects. Furthermore, this study analyzes how satisfaction influences continuance intention and purchase intention for MCU services. The results of this study are expected to provide strategic recommendations for hospitals in building patient-centered digital experiences for business sustainability in the digital era.

## Literature Review

### Integrative Model for Analyzing Mobile Health Applications

This study proposes an integrative model that combines user behavior aspects from the Unified Theory of Acceptance and Use of Technology (UTAUT) and technical system quality from the DeLone & McLean IS Success Model. This integration provides a holistic perspective in analyzing hospital mobile health applications that serve as a bridge between patient needs and technology efficiency.

### Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT is an integrative framework developed by Venkatesh *et al.* (2003) that explains user intention and behavior to use technology with a predictive accuracy of up to 70%. This model consists of four core constructs. First, Performance Expectancy is defined as the extent to which an individual believes technology facilitates task efficiency. Second, Effort Expectancy refers to the level of ease of use and navigation of the system. Third, Social Influence is the perceived support from the social environment for using the system. Lastly, Facilitating Conditions are identified as the availability of infrastructure and technical support. The UTAUT model (namely performance expectancy, effort expectancy, social influence, and facilitating conditions) has been empirically demonstrated to influence satisfaction toward technology post-adoption. For instance, performance expectancy reflects the perceived usefulness of the app, while effort expectancy captures the perceived ease of use. When users perceive high functional value, social reinforcement, and ease of access from the app experience, their satisfaction towards

the application increases correspondingly (Venkatesh *et al.*, 2003; Hidayah *et al.*, 2024; and Kaium *et al.*, 2020). H1: UTAUT constructs influence Satisfaction.

### DeLone and McLean IS Success Model

The DeLone & McLean (2003) model evaluates the effectiveness of information systems through three quality dimensions. Firstly, Information Quality is defined as the accuracy, completeness, and relevance of the content provided. Secondly, System Quality refers to the technical reliability, stability, and responsiveness of the application. Thirdly, Service Quality pertains to the quality of service support and the responsiveness of the assistance provided. User perception and evaluation regarding system quality, information quality, and service quality (as the fundamental constructs of the DeLone and McLean model) are important to build user satisfaction. Furthermore, information quality and service quality are identified as the most significant factors to increase satisfaction (Delone & McLean, 2003; Ginting *et al.*, 2024; Wulandari *et al.*, 2024; and Nie *et al.*, 2023). H2: DeLone and McLean IS constructs influence Satisfaction.

### Satisfaction

Satisfaction refers to the user's evaluation of their experience with system usage. This variable measures the extent to which the digital application or system fulfills the user's expectations, leading to positive responses for the users. In the context of mobile applications, satisfaction is shaped through the user's evaluation of various aspects, including ease of use, information accuracy, system responsiveness, and service quality. Satisfaction is measured using self-reported indicators to evaluate their feedback regarding the application usage experience (Bayastur *et al.*, 2022).

### Continuance Intention

Continuance intention is defined as the user's intention to keep using the application or system after the initial adoption phase. Unlike initial usage, continuance intention emphasizes more on repeated and consistent usage over time. This behavior is influenced by satisfaction

as a determinant factor. In the context of mobile applications, Monthly Active Users (MAU) serve as a practical measure for continuance intention, offering insights into the consistency of user engagement over time (Nie *et al.*, 2023; Chow & Legowo, 2023). If users feel that the application meets and even exceeds their expectations, they are more likely to continue using the application because they believe it fulfills their needs and wants (Binekas *et al.*, 2023; and Nie *et al.*, 2023). H3: Satisfaction influences Continuance Intention.

### Purchase Intention

In-app purchase intention refers to a user's deliberate consideration or planned behavior to acquire digital products or services within an application. In the context of mobile applications, including healthcare, purchase intention is shaped through the evaluation of overall experience benefits and ease, as well as satisfaction towards the application. When users are satisfied with the application usage experience, they are more likely to make purchases (Kbaier *et al.*, 2025). Additionally, consistency of usage plays an important role in strengthening purchase intention. Users who interact with the application features will become more familiar, thus more open to purchasing in-app service offerings. This finding aligns with previous digital literature indicating that satisfaction and continued usage intention influence purchase intention (Huang & Yu, 2022; Zo *et al.*, 2018). H4: Continuance Intention influences Purchase Intention. H5: Satisfaction influences Purchase Intention. Based on the integration of the UTAUT theoretical foundation and the DeLone & McLean IS Success Model previously described, this study constructs a conceptual framework where user satisfaction is positioned as a central mediator that bridges technical and behavioral variables with long-term usage intentions and purchase intentions. The structural relationships and proposed hypotheses are summarized in the following research model:

## Research Methodology

### Research Design

This study employs an inferential quantitative approach to systematically examine the relationship between technology adoption factors, user satisfaction, and purchase intention. To strengthen construct validity, semi-structured interviews with 10 health app users were conducted as a preliminary study. The interview results were utilized to validate the relevance of the UTAUT and DeLone & McLean constructs in the context of hospital apps in Indonesia before entering the quantitative phase to test the hypotheses through statistical evidence (Sekaran & Bougie, 2019).

### Data Collection Method

Primary data were collected through a cross-sectional survey using a structured online questionnaire. The research instrument employed a 6-point Likert scale (1 = Strongly Disagree to 6 = Strongly Agree) to avoid bias towards neutral responses and improve data quality (Taherdoost, 2019). The questionnaire consisted of two main sections. The first section included respondent profiles that encompass demographics, health status, tech-savviness, and app usage behavior. The second section included construct measurements represented by question items to measure UTAUT dimensions (PE, EE, SI, FC), DeLone & McLean dimensions (SQ, IQ, SEQ), Satisfaction, Continuance Intention, and Purchase Intention for MCU services, adapted from established literature (Venkatesh *et al.*, 2003; DeLone & McLean, 2003; Kbaier *et al.*, 2025; Saraswat, S., 2025; Sulistyaningrum, I., *et al.*, 2023).

### Sampling Technique

This study employed a purposive sampling technique to target active users of hospital mobile applications, specifically MySiloam and MIKA, which are the most well-established hospital applications, located in the Greater Jakarta area. To determine the sample size, power analysis with seven maximum predictors was conducted. Using a medium effect size ( $f^2 = 0.15$ ) and a statistical power of 80%, the minimum number of respondents required is

150 (Cohen, 1988). During the survey, 206 valid respondents were collected and used as the unit of analysis. This number met the model stability requirements for PLS-SEM testing with a medium effect size.

### Data Analysis Method

Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) through two main stages following Hair *et al.* (2022). The first stage involves measurement model evaluation, which consists of validity tests (convergent and discriminant) and reliability (Cronbach's alpha and composite reliability). The second stage involves structural model evaluation that presents path significance tests through bootstrapping to test the hypotheses, as well as evaluations of R<sup>2</sup>, Q<sup>2</sup> predict, and f<sup>2</sup> (Shmueli *et al.*, 2019). Importance-Performance Map Analysis (IPMA) is also included as an additional analysis to identify variables that have a large influence (importance) but whose performance needs to be improved managerially (Ringle, C. M., & Sarstedt, M., 2016).

## Results and Discussion

### Results

#### Results of Empirical Data Analysis

This section presents the results of the empirical data analysis for the valid 206 survey responses. It includes the respondent profile description, measurement model evaluation, and hypothesis testing results using the structural model.

#### Respondent Profile

Demographically, the majority of the respondents are female (53.9%). In terms of age, the largest group consists of individuals aged 20-29 years (43.2%), followed by those aged 30-39 years (38.3%) and 40-49 years (12.1%). The remaining respondents are aged under 20 years, between 50-65 years, and over 65 years. Regarding technological proficiency, respondents perceive themselves as highly proficient, with a mean score of 4.3 out of 5.00, indicating that the sample is well-accustomed to using digital platforms. Additionally, most respondents reside in Jakarta (30%) and

Tangerang (28%). The majority have a bachelor's degree (53%), with private employees making up the largest occupational group (43%). In terms of health conditions, 33% of respondents report having no specific health condition, while 26.2% have a temporary condition that is being monitored (such as post-surgery, pregnancy, and ongoing therapy). Among the respondents, 48.1% use the MySiloam app, followed by 28.6% who use the MIKA app, and 23.3% who use both applications. Most respondents have been using the application for more than 12 months (38.8%), while 27.2% have used it for 6-12 months. They primarily use the application with a frequency of 2-3 times per month. The most common uses of the application include booking doctor appointments (76.6%), monitoring their medical record results (54.9%), and creating appointments for diagnostic tests (51.6%), with multiple responses allowed for this survey item.

### Measurement Model Evaluation

The measurement model evaluation was conducted to ensure that the indicators reflect latent variables with reliable consistency. Convergent validity was assessed using two parameters: outer loadings and Average Variance Extracted (AVE). All indicators have values above the recommended threshold of 0.708 (Hair *et al.*, 2022). The indicator with the highest loading value is SEQ4 (0.860), while the lowest is SQ1 (0.691). The SQ1 indicator was retained and not eliminated because, overall, the related variables met convergent validity standards with an adequate AVE value. This indicates a strong correlation between the indicator and its construct. The analysis results show that all variables have AVE values above 0.50 (Hair *et al.*, 2022). The AVE values range from 0.568 (for the System Quality variable) to 0.681 (for the Service Quality variable). This means that each variable is able to explain more than 50% of the variance in its constituent indicators, thus adequately meeting the criteria for convergent validity. Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability ( $\rho_c$ ). Table 3 shows that all variables have Cronbach's Alpha values above 0.70 (Hair *et al.*, 2019), with values ranging from 0.726 (Facilitating

Conditions) to 0.844 (Service Quality). This indicates good consistency in respondents' responses. The Composite Reliability values for all variables are very satisfactory, ranging from 0.840 to 0.895, far above the minimum limit of 0.70 (Hair *et al.*, 2022), which indicates that the measuring instrument used has a very high level of reliability.

### Overall Model Evaluation and Hypothesis Testing

Overall, the research model demonstrates substantial predictive power with an  $R^2$  value of 0.773 for the Satisfaction variable, 0.587 for Continuance Intention, and 0.650 for Purchase Intention. Based on Chin's criterion (1998), these values are considered substantial (strong), indicating that this research model is able to explain 77.3% of the variance in user satisfaction, 58% of the variance in user continuance intention, and 65.0% of the variance in purchase intention. Predictive power evaluation was conducted using the PLSpredict procedure at the indicator level (manifest variables), as recommended by Shmueli *et al.* (2019). The results showed that all indicators in the dependent variable (SA, CI, and PI) had a value of  $Q^2_{predict} > 0$ . Furthermore, a comparison of error values showed that the RMSE of the PLS-SEM model was consistently lower than that of the Linear Model (LM) for all indicators (difference range: -0.146 to -0.237). Based on the majority of indicators having lower errors, this model is categorized as having high predictive power (Shmueli *et al.*, 2019).

### Hypothesis Testing

Exploring the determinants of Satisfaction, the analysis results show that Information Quality (IQ) ( $\beta = 0.205$ ;  $p$ -value  $< 0.01$ ), Effort Expectancy (EE) ( $\beta = 0.219$ ;  $p$ -value  $< 0.01$ ), Service Quality (SEQ) ( $\beta = 0.219$ ;  $p$ -value  $< 0.01$ ), Social Influence (SI) ( $\beta = 0.161$ ;  $p$ -value  $< 0.01$ ), and Performance Expectancy (PE) ( $\beta = 0.131$ ;  $p$ -value  $< 0.05$ ) have positive and significant effects on Satisfaction. These findings indicate that users prioritize content accuracy, ease of use, responsive service, influence from their surroundings, and application usability. This finding aligns with research by Wulandari *et al.* (2024), who observed that in the context of health apps

(such as Halodoc), users place higher value on information accuracy and service responsiveness than on technical features alone. Similarly, the significant impact of Effort Expectancy reinforces the findings of Binekas & Belgiawan (2023), who confirmed that ease of use remains a critical factor in ensuring user satisfaction with digital services. This is further confirmed by the finding that technical factors such as Facilitating Conditions (FC) ( $\beta = 0.038$ ;  $p\text{-value} > 0.05$ ) and System Quality (SQ) ( $\beta = 0.048$ ;  $p\text{-value} > 0.05$ ) are not proven to be significant predictors of user satisfaction in this study. These findings differ from those of Wulandari *et al.* (2024), who generally found significant impacts from the system aspect. The discrepancy in the non-significance of System Quality can be attributed to the maturity level of MySiloam and MIKA as top-tier hospital applications in Indonesia, which offer minimal crashes and errors, acting as a mandatory requirement rather than an additional value that affects user satisfaction.

Furthermore, the non-significant influence from Facilitating Conditions is likely influenced by the demographic profile of respondents, where users are tech-savvy and the maturity level of facilitating conditions in the Greater Jakarta area is high, leading to a less significant impact on user satisfaction. Regarding the impact on business outcomes, Satisfaction (SA) shows the strongest positive influence on Continuance Intention (CI) ( $\beta = 0.766$ ;  $t = 12.711$ ;  $p < 0.01$ ) and a significant direct influence on Purchase Intention (PI) ( $\beta = 0.530$ ;  $t = 4.675$ ;  $p < 0.01$ ). These results strongly support Bayastur *et al.* (2022)'s findings on mobile health apps, which identified satisfaction as a key driver for users to continue using the app. In addition, Continuance Intention (CI) is also shown to have a significant influence on Purchase Intention (PI) ( $\beta = 0.325$ ;  $t = 2.915$ ;  $p < 0.01$ ). This confirms the existence of a hierarchical relationship where satisfaction drives user intention to continuously use the app, which ultimately drives in-app purchase intention, reinforcing the findings of Binekas & Belgiawan (2023).

### Importance-Performance Map Analysis (IPMA)

The IPMA was conducted by setting Purchase Intention as the target variable to map the strategic position of each predictor variable. The mapping results in Figure 2 show that Satisfaction (SA) has very high importance with high performance, followed by Continuance Intention (CI). This empirically indicates that satisfaction is the single most dominant determinant. Statistically, other variables do not have a strong enough direct driving force on Purchase Intention unless they are converted into Satisfaction. Additionally, there are contrasting patterns in the antecedent variables where Facilitating Conditions (FC) and System Quality (SQ) occupy the position with the lowest level of importance (far left) but have a very high-performance score ( $> 80$ ). This indicates that the performance of the available technical features far exceeds what users actually consider important to trigger a purchase. Meanwhile, the Information Quality (IQ), Effort Expectancy (EE), and Service Quality (SEQ) variables, although having a moderate level of total importance, are positioned relatively higher than the technical variables. These data imply that aspects of content, ease of use, and service have a higher relevance in user value perception than technical infrastructure aspects alone.

### Discussion

This study employs an inferential quantitative approach to systematically examine the relationships between technology adoption factors, user satisfaction, and purchase intention in mobile health applications. The research utilized semi-structured interviews with 10 health app users to validate the relevance of the UTAUT and DeLone & McLean constructs, ensuring construct validity before proceeding to a quantitative phase. A cross-sectional survey was conducted using a structured online questionnaire, which featured a 6-point Likert scale to enhance data quality. The sample consisted of 206 valid respondents, predominantly female and aged between 20-39 years, with a high level of technological proficiency. Analysis of the data revealed that the model demonstrates substantial predictive power, with  $R^2$  values of 0.773 for Satisfaction,

0.587 for Continuance Intention, and 0.650 for Purchase Intention. Hypothesis testing using bootstrapping indicated that Information Quality, Effort Expectancy, Service Quality, Social Influence, and Performance Expectancy significantly affect Satisfaction. However, technical factors like Facilitating Conditions and System Quality were not significant predictors, suggesting that users prioritize content accuracy and ease of use over technical features. Furthermore, Satisfaction emerged as the most dominant determinant influencing both Continuance Intention and Purchase Intention, reinforcing the hierarchical relationship between these variables. The Importance-Performance Map Analysis (IPMA) highlighted that while Facilitating Conditions and System Quality exhibited high performance, they were deemed less important in driving Purchase Intention, emphasizing the greater relevance of content and service quality in shaping user perceptions. Overall, the findings underscore the critical role of user satisfaction in the adoption and continued use of mobile health applications, providing strategic insights for enhancing user experience and fostering long-term engagement.

## Conclusion

This study aims to evaluate the determinants of user satisfaction and its impact on purchase intention in mobile health applications, drawing three main conclusions from the empirical analysis conducted. First, Information Quality, Ease of Use, and Service Quality are identified as key drivers of Satisfaction, with health application users prioritizing medical content accuracy, service responsiveness, and ease of use over purely technical aspects. In contrast, infrastructure factors such as Facilitating Conditions (FC) and System Quality (SQ) do not significantly impact user satisfaction, confirming the hygiene factor phenomenon where system sophistication is merely a minimum standard rather than a significant driver. Second, Satisfaction plays a central role in influencing both Continuance Intention (CI) and Purchase Intention (PI). The findings indicate that Satisfaction acts as a full mediator, serving as a prerequisite for purchase intention,

where quality and usability features cannot trigger purchase intention without first establishing user satisfaction. Additionally, satisfied users tend to exhibit strong Continuance Intention, suggesting a sustainable profitability path, as they are more likely to retain long-term and make purchases. Third, Continuance Intention also influences Purchase Intention, implying that increased familiarity with the application through consistent usage enhances the likelihood of purchasing. From a managerial perspective, hospital management teams are advised to strategically reorient their investment focus from technical infrastructure to enhancing content, service quality, and ease of use. This can be achieved by creating innovative medical content, digitizing responsive customer service, and continuously improving app usability. Instead of aggressively pursuing in-app purchases initially, companies should prioritize building strong user satisfaction through high-value features, as satisfaction not only triggers immediate purchase intention but also serves as a foundation for loyalty formation, thereby strengthening long-term revenue streams. However, the study has limitations, including a narrow focus on hospital apps in the Greater Jakarta area and a cross-sectional design that restricts the analysis of changes in user behavior over time. Future research should consider expanding the demographic scope or comparing results with independent health platforms for greater generalizability. Additionally, employing a longitudinal approach is recommended to capture the dynamics of long-term satisfaction and loyalty. Finally, the focus on top-tier hospital apps with established user interface (UI/UX) standards may create a ceiling effect regarding technical assessments; thus, future studies should explore apps from mid-sized hospitals to evaluate the significance of system quality factors in less established digital infrastructures.

## References

- Bayastur, D., Ananda, A., & Indrawati, M. (2022). Factors influencing users' continuance intention in mobile health applications: An empirical study. *Procedia Computer Science*, 197, 556–563.
- Binekas, H., & Belgiawan, P. F. (2023). Factors influence satisfaction and continuance intention of chatbot users. In G. W. Bhawika *et al.* (Eds.), *Proceedings of IConBEM 2022* (AEBMR Vol. 249, pp. 102–116). Atlantis Press. [https://doi.org/10.2991/978-94-6463-216-3\\_9](https://doi.org/10.2991/978-94-6463-216-3_9).
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Lawrence Erlbaum Associates.
- Chow, B., & Legowo, N. (2023). Factors influencing user satisfaction of PeduliLindungi app with UTAUT & DeLone–McLean models: A case study in Indonesia. *Journal of System and Management Sciences*, 13(2), 170–184. <https://doi.org/10.33168/JSMS.2023.0212>.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Data AI Analytics. (2024). *Hospital mobile app user statistics in Indonesia*.
- Ginting, D. P., & Gayatri, G. (2024). UTAUT and in-app purchase: Revealing factors driving users to switch to the premium version in online dating apps. *ASEAN Marketing Journal*, 16(2).
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.
- Hidayah, N. A., Utami, M. C., & Rizki, I. N. (2024). Behavioral intentions of Generation Z and Millennial users of telemedicine: A UTAUT2 analysis from the Halodoc user perspective. *Journal of Information Systems and Informatics*, 6(3), 1373–1399. <https://doi.org/10.51519/journalisi.v6i3.786>.
- Huang, T. Y., & Yu, H. (2022). Understanding the intention to use mobile banking apps: A UTAUT2 perspective. *Asia Pacific Journal of Marketing and Logistics*, 34(5), 860–878.
- Kaium, M. A., Bao, Y., Alam, M. Z., & Hoque, M. R. (2020). Understanding continuance usage intention of mHealth in a developing country: An empirical investigation. *International Journal of Pharmaceutical and Healthcare Marketing*, 14(2), 251–272. <https://doi.org/10.1108/IJPHM-06-2019-0041>.
- Kbaier, E., Bakini, F., & Oueslaty, K. (2025). Investigating the influence of AI chatbot interactions on attitudes and purchase intentions: Extending the UTAUT framework from a brand perspective. *Journal of Business Strategy*. Advance online publication.
- Nexdigm. (2024). *Indonesia E-Health Market Research Report: Market Size, Market Revenue*.
- Nie, L., Oldenburg, B., Cao, Y., & Ren, W. (2023). Continuous usage intention of mobile health services: Model construction and validation. *BMC Health Services Research*, 23(1), 463. <https://doi.org/10.1186/s12913-023-09418-4>.
- Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial Management & Data Systems*, 116(9), 1865–1886.
- Saraswat, S., & Singh, P. (2025). The moderating role of perceived trust in predicting the adoption intention of

consumers toward online pharmacies using the application of UTAUT model. *International Journal of Pharmaceutical and Healthcare Marketing*, 19(4), 964–980.

Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). John Wiley & Sons.

Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322–2347. <https://doi.org/10.1108/EJM-02-2019-0189>.

Sulistyaningrum, I. H., Pribadi, P., & Sari, S. (2023). Exploring consumer intentions to adopt telepharmacy services and development strategic recommendations: Three theoretical approaches. *Pharmacia*, 70(3), 549–556. <https://doi.org/10.3897/pharmacia.70.e109007>.

Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design; review of different lengths of rating scale. *International Journal of Academic Research in Management (IJARM)*, 8(1), 1–10.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.

Wulandari, S., Munzir, M. R., Rozanda, N. E., & Zarnelly. (2024). Influence of user satisfaction of the Halodoc mobile application using the End User Computing Satisfaction (EUCS) and DeLone and McLean methods. *SISTEMASI: Jurnal Sistem Informatika*, 13(2), 740–756.

Zo, R. P., Kahl, S., & Morgan, S. (2018). The effects of habit on intention to repurchase in online environments. *Journal of Retailing and Consumer Services*, 41, 17–25.