

Exploring Factors Affecting User Satisfaction in myIM3: Integrating TAM, UTAUT, and the Information Systems Success Model in Mobile Telecommunication Services

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Abstract. In the highly competitive telecommunications sector in Indonesia, businesses are striving to retain customers by enhancing the functionalities and offerings of their business applications. Indosat, one of the major players, introduced myIM3, a smartphone application for IM3 users, in 2012. However, PT Indosat Tbk witnessed a decline in the number of subscribers by the end of 2020. This decline can be attributed, in part, to the issues faced by IM3 clients when utilizing the myIM3 application to meet their needs, resulting in a decrease in user satisfaction with Indosat. To address this problem, this research combines the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Information Systems Success Model. TAM is used to predict the degree of user acceptance of the myIM3 application system; UTAUT explains user acceptance of technology; and the Information Systems Success Model identifies the factors that influence myIM3, highlighting those with the greatest impact. The findings of this study reveal that system quality has the most significant influence on user satisfaction with the myIM3 application, followed by familiarity and performance expectancy. These findings provide valuable insights for Indosat to enhance user happiness, resulting in increased adoption and utilization of the myIM3 application. In summary, this research sheds light on the factors influencing user satisfaction with the myIM3 application in the context of Indosat. By employing a combination of TAM, UTAUT, and the Information Systems Success Model, the study highlights the importance of system quality, familiarity, and performance expectancy.

Keywords: telecommunication, user satisfaction, TAM, UTAUT, Information Systems Success Model

1. Introduction

There is no denying that we live in the current era of technology. Whatever industry or aspect of life we study, technology has a significant impact. Because technology can be used as a driving force in many elements that have been proven to make business operations more effective and efficient, it has revolutionized the way companies see and do business (Santhosh T, 2018).

Every business must have its own vision and mission, and with the strong demand for communication that is rising along with technological advancements today, telecommunication companies must be able to decide strategies more quickly and creatively. In telecommunications firms, a variety of outside factors, such as marketing tactics seen as "gates" to achieving objectives and maximizing revenues, have an impact on the company's vision and mission (Alsayed, 2020).

For companies, identifying client behavior is important, and the knowledge can be used to improve and develop future company operations (Mahardika & Gupta, 2018). Nowadays, many organizations in Indonesia are competing in the telecommunications industry to retain consumers by enhancing their business application features and services (Goyal & Kar, 2020). One of these companies is PT Indosat Tbk, better known as Indosat Ooredoo Hutchison (or Indosat).

In 2012, Indosat Ooredoo launched myIM3, an application for smartphones. In 2012, Indosat Ooredoo launched myIM3, an application for smartphones. Indosat Ooredoo customers can use the myIM3 application to check pulses, quotas, internet packages, read service-related information, buy credit or quotas, and play games to get prizes based on the number of points as shown in Figure 1.

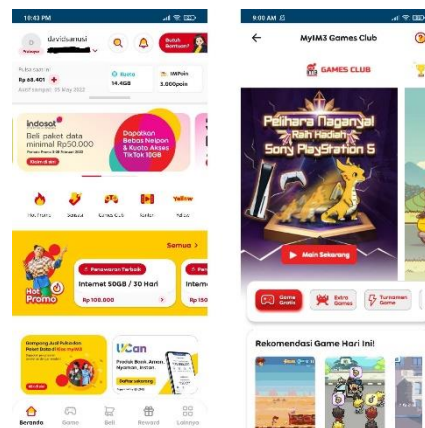


Fig. 1: myIM3 User Interface

According to a survey by the Asosiasi Penyelenggara Jasa Internet Indonesia (APJII) (Irawan et al., 2020), more Indonesians are connected via smartphones or cell phones than through computers, as shown in Figure 2. The myIM3 application, which is based on a mobile-based concept, should be more readily accepted, and used by users, as cellphones are the primary method of accessing the Internet.



Fig. 2: APJII Survey Results

The revenue position of Indosat has declined from 2016, when it was only 50.8 trillion IDR, a decrease of 4.5 trillion IDR. It can be noted that there was a considerable decline in income between 2016 and 2017, namely 3.4 trillion IDR, during those two years. In 2017, the income position was only

47.3 trillion IDR in September. Indosat's revenue dropped by eight trillion IDR for the second time in around two years. But, in May, specifically at the start of 2019, Indosat, with the ISAT code, slipped into the red zone, which is very concerning as it nearly declined by roughly 5.3% (Alamsyahbana et al., 2021).

According to Chan et al. (2023), It is tough to imagine living without smartphones because they have become essential tools for people of all ages worldwide. By providing convenience, Indosat hopes that the myIM3 application can increase customer happiness and loyalty.

Even though myIM3 has been running since 2012, the performance of the application has been fluctuating until now. For example, on Wednesday, March 14, 2018, an IM3 user sat together and met one-on-one with M. Bair, Manager of Digital Care (Indosat Care) of Indosat, to discuss and resolve issues regarding loss of credit and the internet quota he experienced in January, February, and March 2018 (Wardhana, 2018). According to another report provided by a user on *mediakonsumen.com*, she purchased a 25GB 30-day IM3 internet package via the myIM3 application on January 27, 2022, but the transaction failed, and until February 16, 2022, there was no return for money (Desi, 2022).

Some issues based on user reviews are as follows:

- The application cannot be opened, and when accessed, it says that the application has an error.
- The application can be opened, but when opened, the myIM3 application only displays a promotional front page.
- The user makes an internet package purchase transaction, but they don't receive the quota while the credit has been deducted.

According to prior research, user satisfaction has a significant influence on the long-term use of information systems (Liao et al., 2009). On this basis, the application's aspects that can raise user satisfaction must also be upgraded. On this basis, elements of the application that can increase user satisfaction should also be investigated.

According to Razak et al. (2022), TAM (Technology Acceptance Model), and UTAUT (Unified Theory of Acceptable and Use of Technology) are the most prominent theories used to conduct digital transformation research. Based on these needs, TAM, which is used to predict the level of user acceptance, and UTAUT, which is used to explain the user acceptance of the technology, will be combined with the Information Systems Success Model to measure the level of user satisfaction based on the myIM3 application used.

One of the current issues is determining which characteristics or factors influence user satisfaction with self-service applications so that telecommunications companies can analyze and improve their services. The problem that can be formulated in this research is what variables influence the satisfaction of myIM3 application users and what variables have the most influence. The research approach used in this study is slightly different because it combines TAM, UTAUT, and the Information Systems Success Model by looking at the relationship between variables, so that the research results are more accurate and have a wider reach.

2. Literature Review

2.1. myIM3

MyIM3 is a digital service offered by Indosat Ooredoo that fulfills online requests for information and services from subscribers to its cellular network. Both the Google Play Store and the App Store offer myIM3. MyIM3 is offered without charge to make IM3 users happier. The myIM3 application provides access to a customer's profile information, card information, package list and transactions, package usage information, postpaid invoices, and top-up services. With the myIM3 software, users can view credit bills by choosing the "Billing" option, followed by the "Billing Details" menu for postpaid IM3 card subscribers. Customers of prepaid services can add credit using the myIM3 application by choosing the "Top Credit" menu and following the on-screen directions. Self-checkout systems and smart

shopping carts, such as myIM3, are becoming commonplace in business, according to Knezevic et al. (2020).

2.2. User Satisfaction

Armstrong & Kotler (2009) define customer satisfaction as the degree to which consumers believe that a product performs in accordance with their expectations. When a product's performance does not live up to expectations, the customer is unhappy; when expectations and performance are in line; when product performance exceeds expectations; and when the buyer is extremely happy or delighted, A top-notch marketing agency goes beyond retaining crucial customer happiness. Most studies indicate that higher levels of customer satisfaction boost customer loyalty, which increases business success. Wise companies simply promise what they can achieve, then go above and beyond to wow their clients. According to De et al. (2023), businesses must focus on product or service elements and present an extensive selection of actual images and videos regarding the product so that customers may feel the effect of the product, including in the myIM3 application.

2.3. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) in Figure 3 is a model for prediction, not description, that is used to predict user satisfaction with the system. The concept implies that when users are offered the option to utilize a new system, a variety of factors, including ease and usability (users' belief that utilizing the system will improve their performance), influence their decisions about how and when to use it. According to TAM, a person's ability to conduct a certain behavior depends on their behavioral intentions to complete that behavior. It is anticipated that two factors—perceived utility and perceived ease of use—are the key determinants of consumer approval (Alfadda & Mahdi, 2021). Taking consideration of the relationships within the TAM, attitudes about technology strongly impacted behavioral intention through perceived utility and perceived ease of use (Scherer et al., 2019).

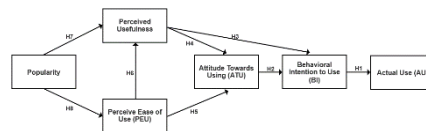


Fig. 3: Technology Acceptance Model (Davis, 1998)

2.4. Unified Theory of Acceptable and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) concept in Figure 4 is used to explain how users perceive technology and how they use it. According to the UTAUT paradigm, the four potential constructs to explain user perception and acceptance behavior are performance expectancy, effort expectancy, social influence, and facilitating factors. The UTAUT model emphasizes how behavioral intention utilize a system or technology is theoretically and experimentally influenced by performance expectancy, effort expectancy, social influence, and facilitating factors (Venkatesh et al., 2003).

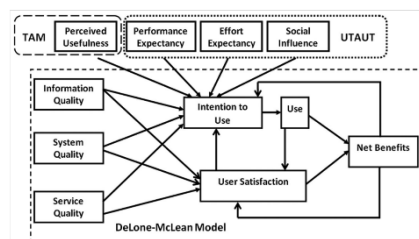


Fig. 4: Unified Theory of Acceptable and Use of Technology (Venkatesh et al., 2003)

2.5. Information Systems Success Model

It is crucial to assess the system put in place in a business. We can determine which components of the company's system require maintenance, repair, or improvement based on the results of this evaluation.

The Information Systems Success Model in Figure 5 aims to provide a thorough knowledge of IS success by defining, describing, and elucidating the links between six of the most important success aspects that are frequently used to assess information systems (DeLone & McLean, 2003).

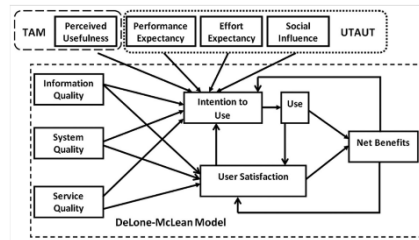


Fig. 5: Information Systems Success Model (DeLone & McLean, 2003)

3. Methodology

3.1. Research Model

The Familiarity variable is a brand-new component that is employed as an external factor in this investigation. Gefen (2000) asserts that familiarity is a necessity for trust because it establishes a framework and awareness of the surroundings and trusted people that allow for the justification of trust expectations. According to a study by Sofyan and Rohman (2011), user satisfaction and customer loyalty are significantly impacted by the familiarity variable. Users who are already used to similar applications will be more satisfied and loyal to the myIM3 application.

The UTAUT model's performance expectancy variable measures how much people believe that utilizing the system will help them improve their job performance (Venkatesh et al., 2003). UTAUT is dedicated as a theoretical foundation for presenting a conceptual model in this study, with the goal of selecting the appropriate model that encompasses nearly all the aspects that affect user intention and happiness with a system (Al-Saedi et al., 2020). TAM, in addition to UTAUT, has a major impact on Intention to Use (Jeong & Kim, 2023). This implies that users' behavioral intentions to use mobile-based communication technology such as myIM3 for information access will be influenced if they believe it will increase the efficiency of their daily interactions.

Perceived usefulness, in the words of F. D. Davis (1989), is "the degree to which a person believes that utilizing a certain system would improve his job performance." This is inferred from the word's definition, which states that it can be put to effective use. According to Alfiardi (2019), there is a connection between perceived usefulness and intention to use. In other words, as online transaction services are more easily accessible, they can improve quality, performance, productivity, and work efficiency, which in turn increases user behavioral intent to myIM3.

According to Hadullo et al. (2018), achieving a high degree of system quality by considering the stated quality elements is necessary for the e-learning system to be successful. System quality measures a website's or application's usability based on user goals, the accessibility of navigation menus that make it easier for users to conduct tasks, and the speed at which pages load and files are downloaded. So, it can be said that the quality of the system is able to achieve user satisfaction if it is able to meet user expectations to be able to conduct transactions in a way that is practical, comfortable, and timesaving. That is, user satisfaction rises in direct proportion to system quality (DeLone & McLean, 2003). If myIM3 can maintain good and consistent system quality, then user satisfaction will increase. Chow & Legowo (2023) suggest that self-service application developers continue to improve the system's quality because many people use the application, so it is necessary to improve the system's quality so that the application continues to run smoothly even after many users have used it.

If customers engage in specific activities, how they are seen by a reference group is described by subjective norms (2020). According to Bananuka et al. (2020), there is an association between Subjective Norm and Intention to Use. Subjective norms will determine whether an IM3 user will use

myIM3 or not based on their beliefs.

System Quality is one of the characteristics that affect Intention to Use. Masri et al. (2020) claim that customer relationship quality (satisfaction) has a favorable impact on customers' inclinations to return. Those who gave the system high marks for personalization said they planned to visit the website again. This suggests that greater target market awareness of personalization features in the myIM3 application will result in a greater volume of repeat users or more customer loyalty.

Contrary to process models, causal or variance models investigate the covariance of success measures to ascertain whether there is a causal relationship between them, according to DeLone & McLean (2003). For instance, it is predicted that better system quality will boost user happiness and use intention, which will have a favorable effect on individual productivity (usage) and raise organizational productivity.

According to the original formulation of the DeLone & McLean Model, "use" and "user satisfaction" are closely related, and positive experiences with "use" will lead to greater "user satisfaction" in the process sense. In this study, the Use variable is arranged first and leads to the User Satisfaction variable because, after the user intends to use the application, he must use it and feel how good it is until he is finally satisfied (DeLone & McLean, 2003).

Based on the various models previously described, a combined model is proposed in Figure 6, in which the variables are as follows: familiarity as an external factor, perceived usefulness, and subjective norm from the TAM research paradigm; performance expectancy from the UTAUT research paradigm; and information quality, system quality, intention to use, use, and user satisfaction from the Information Systems Success Model research paradigm.

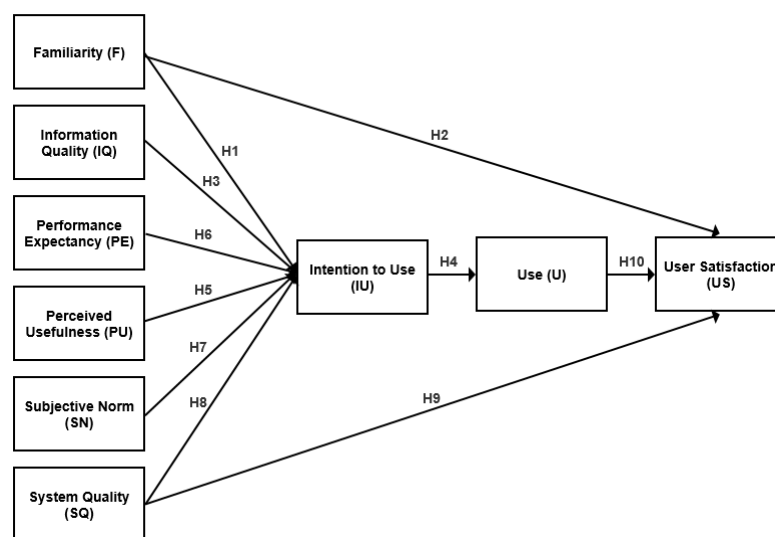


Fig. 6: Research Model

3.2. Hypotheses

The research data will be analyzed using the Bootstrap methodology. To complete the sample size statistics and ensure that the sample accurately reflects the population data, the Bootstrap method relies on resampling sample data under the condition that the data returns. The pursuing theories will be examined (H_0 , or "null hypothesis," means there is no effect, and H_a , or "alternative hypothesis," means there is an effect).

1. H1₀: Familiarity does not have a positive and significant effect on Intention to Use.
H1_a: Familiarity has a positive and significant influence on Intention to Use.
2. H2₀: Familiarity does not have a positive and significant effect on User Satisfaction.
H2_a: Familiarity has a positive and significant influence on User Satisfaction.
3. H3₀: Information Quality does not have a positive and significant effect on Intention to Use.
H3_a: Information Quality has a positive and significant influence on Intention to Use.
4. H4₀: Intention to Use does not have a positive and significant effect on Use.
H4_a: Intention to Use has a positive and significant influence on Use.
5. H5₀: Perceived Usefulness does not have a positive and significant effect on Intention to Use.
H5_a: Perceived Usefulness has a positive and significant influence on Intention to Use.
6. H6₀: Performance Expectancy does not have a positive and significant effect on Intention to Use.
H6_a: Performance Expectancy has a positive and significant effect on Intention to Use.
7. H7₀: Subjective Norm has no positive and significant effect on Intention to Use.
H7_a: Subjective Norm has a positive and significant influence on Intention to Use.
8. H8₀: System Quality does not have a positive and significant effect on Intention to Use.
H8_a: System Quality has a positive and significant influence on Intention to Use.
9. H9₀: System Quality does not have a positive and significant effect on User Satisfaction.
H9_a: System Quality has a positive and significant influence on User Satisfaction.
10. H10₀: Use does not have a positive and significant effect on User Satisfaction.
H10_a: Use has a positive and significant effect on User Satisfaction.

3.3. Variables and Indicators

Table 1: Variables and Indicators

Variables	Sub-Variables	References	Indicators
Familiarity (Gefen, 2000)	Usage Familiarity	Gefen (2000)	I am familiar with using mobile applications.
	Transaction Familiarity		I am familiar with online transactions on mobile applications.
	System Familiarity		I am familiar with the myIM3 application.
	Scoring Familiarity		I am familiar with how to provide ratings and reviews for mobile applications.
Information Quality (DeLone & McLean, 2003)	Completeness	DeLone & McLean (2003)	The information displayed in the myIM3 application is complete for me.
	Ease of Understanding		The information displayed in the myIM3 application is easy for me to understand.
	Relevance		The information displayed in the myIM3 application is

			relevant to my needs.
	Security		I can rely on the authenticity of the information displayed in the myIM3 application.
Performance Expectancy (Venkatesh et al., 2003)	Improved Achievement	Aditya & Permadi (2018)	Using the myIM3 application increases my achievement of the goals I want to achieve.
	Motivation to Learn		The myIM3 application increases my motivation to make online transactions.
	Convenience		MyIM3 application is easy for me to use.
	Job Fit		The features provided in the myIM3 application suit my needs.
Perceived Usefulness (Davis, 1989)	Accelerate Work	Napitupulu et al. (2018)	Using the myIM3 application speeds up in finding information and making online transactions.
	Improved Performance		Using the myIM3 application increases my productivity.
	Effectiveness		The function of the myIM3 application is effective for me to use.
	Helpful		MyIM3 application is useful for me.
Subjective Norm (Fishbein & Ajzen, 1977)	Influence from family	Fishbein & Ajzen (1977)	My family uses the myIM3 application.
	Influence from peer		My friends use the myIM3 application.
	Influence from society		The people around me use the myIM3 application.
System Quality (Hudin et al., 2018)	System Availability	Hudin et al. (2018)	The myIM3 application is always available when I want to use it.
	System Flexibility		MyIM3 application is flexible for me to use.

	System Reliability		I can rely on the myIM3 application.
	System Consistency		The myIM3 application is always consistent when I use it.
Intention to Use (DeLone & McLean, 2003)	Hope to Use	Faisal et al. (2021)	I plan to use the myIM3 application.
	Utilization		I will use the myIM3 application to view information and make online transactions.
	Planning to Use Long Term		I plan to use the myIM3 application in the long term.
	Use More Often		I will use the myIM3 application more often.
Use (Davis, 1989)	Monthly Use	Davis (1989)	I use the myIM3 app every month.
	Frequency of Use		I often use the myIM3 application.
	Consistency Usage		I use the myIM3 app consistently.
	Intention to Reuse		I will use the myIM3 application again next time.
User Satisfaction (DeLone & McLean, 2003)	Recommendation	Alzate et al. (2021)	I would recommend the myIM3 app to others.
	Experience		I have a satisfying experience when using the myIM3 application.
	Rating		I will give a high rating for the myIM3 application.
	Review		I will give a good review for the myIM3 application.

3.4. Population and Sample

The population in this study is comprised of all users of the myIM3 application in Indonesia. The downloaders and users of the myIM3 program are the respondents to this research questionnaire. With a total sample of 7,854,912 downloaders, the number of myIM3 downloads on the Google Play Store is 7,763,412 (Google Play Store, 2023), and the number of myIM3 downloads on the App Store is 91,425 (App Store, 2023).

In conclusion, the overall study population is 7,854,912 users. The Slovin formula will be used, assuming a 5% (or 0.05) margin of error. Here is the formula:

$$n = N / (1 + (N * e^2))$$

Information:

n = Sample size

N = Population size

E = margin of error

The populations used in this study are:

$$N = 7854912$$

So,

$$n = 7854912 / 1 + (7854912(0.05)^2)$$

$$n = 399.98$$

$$n \approx 400 \text{ respondents}$$

4. Results and Discussion

4.1. Respondents Identification

Data collection was conducted using a Google Form questionnaire that was distributed to representatives of myIM3 application users who had used and engaged in the use. There was a total of four hundred respondents, and the questionnaire consisted of thirty-five questions. After the survey target is reached, the data is calculated and processed using the SmartPLS application. Respondents in this study were users of the myIM3 application in Indonesia. To obtain demographic data on respondents consisting of gender, age, last education level, and how often and for how long they have used the application, in detail, the demographic data of the respondents is as follows:

1. Demographic by gender

Demographics are divided into two: Male and Female. The trial was distributed to four hundred respondents. The male group consisted of 239 respondents, or 59.8%, and the female group consisted of 161 respondents, or 40.3%.

2. Demographics by age

Based on age, demographics are divided into five sections: <18 years, 18–25 years, 26–40 years, and >40 years. As with the above, the first trial was distributed to four hundred respondents. According to the results of users aged <18 years as 32 people, 18–25 years as 114 people, 26–40 years as 121 people, and over 40 years as 15 people.

3. Demographics based on recent education

Based on recent education, demography is divided into five sections: SMA/SMK equivalent, D3, S1, S2, and S3. Likewise, the trial was distributed to four hundred respondents. The results were ninety-one people from SMA/SMK equivalent, 253 people for S1, forty people for S2, two people for S3, and the remaining fourteen people with other recent education.

4. Demographics based on frequency of use of the myIM3 application

Based on the frequency of use, demographics are divided into four sections: Once a day, more than once a day, Once a week, and once a month. Likewise, the trial was distributed to four hundred respondents. The results of using one time a day as forty-six people, twenty-six people more than once a day, 120 people once a week, and one time a month as 208 people.

5. Demographics based on length of use of the myIM3 application

Based on the duration of use, demographics are divided into four parts: 1 month, <1 year, 1–2 years, and >2 years. Likewise, the questionnaire was distributed to four hundred respondents. With the results of users with a duration of use of 1 month (58 people), 1 year (124 people), 1–2 years (78 people), and > 2 years (140 people).

4.2. Validity Test

A validity test is used to measure whether the questionnaire is valid or not. The validity test is conducted with PLS-SEM by measuring the Average Variance Extracted (AVE). The AVE value will indicate the level of comfort possessed, with an AVE value of 0.5 or more indicating that the construction can represent more than 50% of the indicator variance. Based on Table 2, it shows that all indicators have Average Variance Extracted values above 0.5. That way, all indicators are declared valid.

Table 2: Outer Loading Data

Indicators	Loading Factor	Standard Value	Results
F1	0.871	0.6	Valid
F2	0.820	0.6	Valid
F3	0.871	0.6	Valid
F4	0.855	0.6	Valid
IQ1	0.886	0.6	Valid
IQ2	0.911	0.6	Valid
IQ3	0.897	0.6	Valid
IQ4	0.868	0.6	Valid
IU1	0.886	0.6	Valid
IU2	0.888	0.6	Valid
IU3	0.924	0.6	Valid
IU4	0.920	0.6	Valid
PE1	0.910	0.6	Valid
PE2	0.879	0.6	Valid
PE3	0.875	0.6	Valid
PE4	0.906	0.6	Valid
PU1	0.893	0.6	Valid
PU2	0.852	0.6	Valid
PU3	0.907	0.6	Valid
PU4	0.915	0.6	Valid
SN1	0.873	0.6	Valid
SN2	0.938	0.6	Valid
SN3	0.934	0.6	Valid
SQ1	0.913	0.6	Valid
SQ2	0.924	0.6	Valid
SQ3	0.937	0.6	Valid
SQ4	0.914	0.6	Valid
U1	0.842	0.6	Valid
U2	0.901	0.6	Valid
U3	0.917	0.6	Valid
U4	0.806	0.6	Valid
US1	0.918	0.6	Valid
US2	0.915	0.6	Valid
US3	0.953	0.6	Valid

4.3. Reliability Test

To assess the consistency or stability of the assertions arranged in the questionnaire, a reliability test is required. Testing for reliability uses Cronbach’s alpha score. The reliability level ranges from 0.0 to 0.20 (least reliable), > 0.2 to 0.4 (somewhat reliable), > 0.4 to 0.6 (very reliable), > 0.6 to 0.8 (trusted),

and > 0.8 to 1 (highest reliability). Each variable has a reliability coefficient value above Cronbach's alpha, according to the findings of the reliability test calculations in Table 3, making it possible to classify all the variables as very Reliable.

Table 3: Cronbach's Alpha Data

Indicators	Cronbach's Alpha Value	Results
Familiarity	0.879	Very Reliable
Information Quality	0.913	Very Reliable
Performance Expectancy	0.915	Very Reliable
Perceived Usefulness	0.914	Very Reliable
Subjective Norms	0.903	Very Reliable
System Quality	0.941	Very Reliable
Intention to Use	0.926	Very Reliable
Use	0.890	Very Reliable
User Satisfaction	0.949	Very Reliable

4.4. Structural Test

Figure 7 shows a PLS-SEM image of a complete structural model. Each manifest latent variable's share of variance that may be accounted for by the latent variable is described by the measurement model. It will be possible to determine which indications play a larger role in the emergence of latent variables thanks to the measurement model. Following the description of the measurement model for each latent variable, a model structure will be created to investigate the impact of each independent latent variable (exogenous) on the latent dependent variable (endogenous).

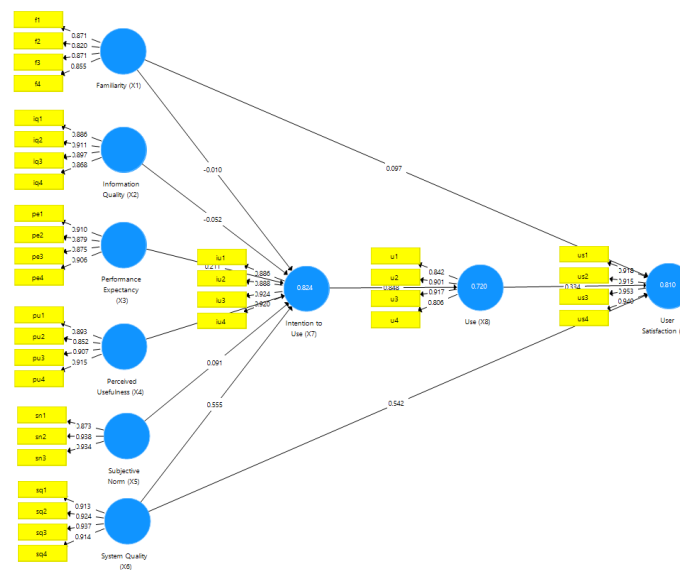


Fig. 7: Outer Model with PLS-SEM

4.5. Evaluation of Measurement Model (Outer Model)

The link between latent variables and their indicators, whether they are reflective or formative, is defined by the measurement model. The Average Variance Extracted (AVE) is considered in the measurement model evaluation performed on the outer model. Convergent Validity has been satisfied based on the findings in Table 4 because it has an AVE value better than 0.5. The dependability of internal consistency, as represented by the composite reliability value of each latent variable in PLS, is then evaluated to evaluate the reliability of latent variables. The composite reliability is met if there is a value of more than or equal to 0.7.

Table 4: AVE Values

Latent Variable	Average Variance Extracted (AVE)	Standard Value	Conclusion
Popularity	0.730	0.5	Valid
Information Quality	0.793	0.5	Valid
Intention to Use	0.819	0.5	Valid
Perceived Usefulness	0.796	0.5	Valid
Performance Expectancy	0.797	0.5	Valid
Subjective Norm	0.838	0.5	Valid
System Quality	0.850	0.5	Valid
Use	0.753	0.5	Valid
User Satisfaction	0.868	0.5	Valid

4.6. Evaluation of Structural Model (Inner Model)

The measuring model determines the relationship between latent variables and their indicators, whether reflective or formative. An evaluation of a measuring model can be done by looking at convergence Validity. The convergence Validity can be assessed by examining the Loading Factor value of each indicator on its corresponding latent variable. The indication is deemed valid if the latent variable's loading factor value is greater than or equal to 0.7. The outcomes were assessed using T-statistics for path coefficients and R-Square values at a significant level (alpha) of 0.05 with a two-tailed test. Based on the findings in Table 5, the exogenous factors in this study had an influence proportion of 82.4% on the Intention to Use variable, a proportion of 72% on the Use variable, and an influence proportion of 81% on the User Satisfaction variable. The remainder is a percentage that is influenced by various factors outside the scope of this investigation.

Table 5: R-Square Results

Variables	R-Square Values	Variables Effect on Research	Conclusions
Intention to Use	0.824	82.4%	High
Use	0.720	72%	High
User Satisfaction	0.810	81%	High

4.7. Hypotheses Testing Results

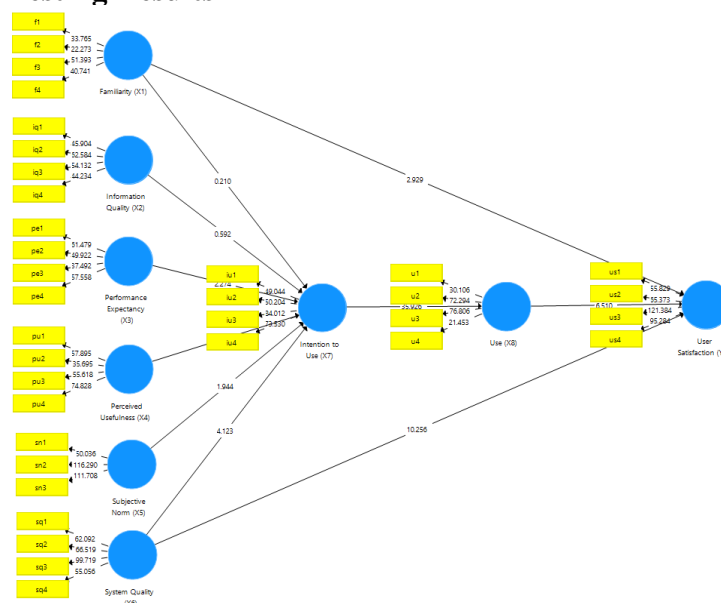


Fig.8: Bootstrapping Result with PLS-SEM

The bootstrap diagram generated from Figure 8 and Table 5, which also shows the t-statistical value of each variable's relationship to the path coefficient, shows the findings of the correlation evaluation between variables. The conclusion is that major and insignificant variables are related. Table 6 displays the t-statistic value for each association between a latent variable (path coefficient). P-Values that are less than 0.05 should be used to reject H₀ or indicate a substantial effect.

Table 6: Hypotheses Testing Results

Variable Relationship	Original Sample (O)	T Statistics ((O/STDEV))	P-Values	Results
Familiarity -> Intention to Use	-0.010	0.2099	0.834	Rejected
Familiarity -> User Satisfaction	0.097	29.289	0.004	Accepted
Information Quality -> Intention to Use	-0.516	0.5917	0.554	Rejected
Intention to Use -> Use	0.849	359.261	0	Accepted
Perceived Usefulness -> Intention to Use	0.166	16.146	0.107	Rejected
Performance Expectancy -> Intention to Use	0.211	22.740	0.023	Accepted
Subjective Norm -> Intention to Use	0.091	19.438	0.053	Rejected
System Quality -> Intention to Use	0.555	41.227	0	Accepted
System Quality -> User Satisfaction	0.542	102.559	0	Accepted
Use -> User Satisfaction	0,334	6,467	0	Accepted

Based on the results, Intention to Use has a significant effect on Use, and Use has a significant effect on User Satisfaction. However, Familiarity does not have a significant effect on Intention to Use. Thus, Familiarity does not have a significant effect on User Satisfaction through Intention to Use but has a significant influence on User Satisfaction directly. The user's familiarity with the myIM3 application determines whether the user is satisfied without having to use the application first.

Intention to Use has a significant effect on Use, and Use has a significant effect on User Satisfaction. Performance Expectancy also has a significant influence on Intention to Use. Thus, Performance expectations have a significant influence on User Satisfaction. This implies that the behavioral intention of users to use the myIM3 application and access information in it will be influenced if they anticipate the function of the myIM3 application to offer greater performance in their daily transactions, which will lead to an increase in user satisfaction.

Intention to Use has a significant effect on Use, and Use has a significant effect on User Satisfaction. System Quality also has a significant influence on Intention to Use. Thus, System Quality has a significant influence on User Satisfaction through Intention to Use. System Quality also has a significant influence on User Satisfaction directly. Therefore, the quality of the system makes myIM3 users know and understand the payment system and has a significant effect on the level of user satisfaction.

There is no positive association between subjective norms and user satisfaction, according to the findings, because subjective norms have no positive effect on intention to use. This contradicts TAM's

core theory, which argues that subjective norms are one of the factors that drive use intention. This indicates that incentives or directions from others have little influence on whether someone intends to use the myIM3 program.

Other than the path coefficients, the most influential variable in this study when compared to other exogenous variables is System Quality, which is equal to 0.555, which influences User Satisfaction indirectly through Intention to Use (influence on Use of 0.849) and Use (influence on User Satisfaction of 0.334).

4.8. Managerial Implication

To make it easier for users, PT Indosat Tbk internal parties can carry out many managerial implications about the myIM3 application as an application that is also a sort of Customer Relationship Management (CRM). This research can be utilized to inform and evaluate managers' motivation, opportunities, processes, issues, and performance thus far. The identification of various obstacles and problems experienced thus far can be used as a reference for future improvements and enhancements to the myIM3 program.

To raise customer happiness even more, service quality must be increased so that more and more people utilize the myIM3 program. This can be used to gauge the success of the myIM3 application. Based on DeLone and McLean's theory, the following implicit explanation occurs:

1. The increased number of people accessing the myIM3 application is a result of the higher quality of information offered in the application. As a result, users rely on the information provided in the myIM3 application to obtain information that will assist them in their work and meet their needs.
2. The convenience of requesting services using the myIM3 application is also beneficial. Users can now simply and quickly request assistance if they encounter issues when using the myIM3 program.

Based on the findings of the previous hypotheses, it is possible to conclude that when individuals use highly trustworthy information systems, their user happiness increases, and the ensuing information and great service have a secondary impact on usage and usage intentions. A terrible app experience, on the other hand, will have a direct impact on how satisfied users are with the app. As a result, the myIM3 application must be upgraded to continue to develop and give users an exceptional user experience.

The information system must be used as quickly, simply, and safely as possible so that users of the myIM3 application can easily follow it. This will assist new users in becoming connected with the application more quickly and provide a positive experience for myIM3 application creators and managers.

5. Conclusions

This study aims to determine the variables that affect IM3 user satisfaction when utilizing the myIM3 application, particularly when conducting cellular-related actions like purchasing internet packages and trading points. This study is helpful in determining whether Indosat's myIM3 application has met the company's expectations for benefits. As a part of this investigation into the use of mobile application media, the Indosat company's myIM3 application is evaluated. The inner and outer models are evaluated using partial least squares structural equation modeling (PLS-SEM), which makes use of the SmartPLS application. Four hundred people participated in the survey method utilized for this study, which suggests that several factors affect user satisfaction.

Based on the results, it can be concluded that Familiarity, Performance expectation, and System Quality influence the satisfaction of myIM3's users, with system quality being the most influential one. User satisfaction will rise as users become more accustomed to the myIM3 program. So that the familiarity value and myIM3 user happiness both rises, myIM3 application developers can use this to perform market research to learn about people's preferences and must create a myIM3 application whose

functions or features are understood by users or are used by users.

The performance of the myIM3 application and ease of access to trusted information are intended to increase user happiness. MyIM3 application users can feel their demands are met, and their happiness will rise if myIM3 developers build and implement features in the myIM3 application that offer greater performance for information search needs and daily transactions.

The myIM3 system's high quality will boost customer happiness. Based on this, the myIM3 application developer must create an effective application system that meets the needs of myIM3 users and conduct regular maintenance to maintain system security and stability and maximize user satisfaction.

These findings are not just relevant to apps like myIM3, but also to studies about information systems and user satisfaction. Because consumers feel close to or familiar with the information system offered in a system, the familiarity variable can boost customer satisfaction. The system quality variable shows that a well-designed and developed system would boost user satisfaction by providing quality and accurate information. The performance expectation variable indicates that if the user can fulfill the goals that they set for themselves while using the information system, they will be satisfied and likely to utilize the system again.

Several suggestions for PT Indosat Tbk to improve the myIM3 application are to conduct market research to find out people's preferences and to design the myIM3 application whose functions or features are understood by users or commonly used by users. users, so that the familiarity value increases and myIM3 user satisfaction also increases. MyIM3 developers can also design and develop features in the myIM3 application that offer greater performance for the needs of information search and daily transactions, so that myIM3 application users feel that their needs are met, and their satisfaction will increase. Finally, the myIM3 application developer must design and develop a good application system that suits the needs of myIM3 users, as well as carry out routine maintenance to maintain system security and stability so that user satisfaction increases.

In addition to the questionnaire now used to collect data, it is planned that future research will also include interviews, observation, or other research approaches. Because this research only employs quantitative techniques, future studies are anticipated to take a mixed-methods approach to reinforce their conclusions.

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