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The Impact of Mobile Service Quality, Perceived Value, Perceived Usefulness, Perceived Ease of Use, Customer Satisfaction Towards Continuance Intention to Use MyTelkomsel App

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Abstract

The community's high level of mobility has sped up mobile application development. Businesses from various industries raced to create their applications because it boosts brand loyalty and customer relationship, increasing revenue for the company. As the fifth-largest nation with a mobile application market share in 2021, Indonesia represents a sizable potential market in the next years. Telkomsel has capitalized on this potential by creating its mobile purchasing app, MyTelkomsel. The app has received 100 million downloads on Google Play Store and a 4.5-star rating. However, given that MyTelkomsel had a decline in monthly active users (MAU), falling to the 28th position in 2023, it is unclear whether it can keep its customers' intention to continue using the service. This study analyzes the conceptual model created by earlier related literature and identifies the factors that have a major impact on consumers' intentions to continue using MyTelkomsel. Customers of MyTelkomsel are the subjects of qualitative semi-structured interviews and quantitative surveys as part of this study. The interview findings were examined using open coding, while the questionnaire results were analyzed using PLS-SEM. According to the findings, Perceived Value, Perceived Usefulness, Perceived Ease of Use, and Customer Satisfaction positively impact Continuance Intention to Use. Service Content Quality and Customer Service Quality positively impact perceived Value and Customer Satisfaction. However, it has been demonstrated that Mobile Network Quality has no appreciable impact on Perceived Value. These results should help inform the development of stronger strategies for mobile app retention in the telecommunications sector or other relevant businesses in Indonesia. Future research is anticipated to include more factors, samples, and a wider scope due to research limitations better to explain the continual use intention of telecommunication apps.

Keywords: Continuance Intention to Use; Mobile Apps; Telecommunication.

A. INTRODUCTION

The most critical demand in the current generation is mobile applications, which have grown increasingly crucial in our period. As implied by the word "mobile" in its name, the mobile application was created to make life easier for users and support their mobility so they can effortlessly carry out their daily tasks anywhere. As a result, the community's high level of mobility is another factor contributing to the current rapid growth in the development of mobile applications. According to data from Google's COVID-19 Community Mobility Report as of October 15, 2022, there has been a significant rise in the mobility trends for locations like workplaces (+20%), parks (+29%), grocery & pharmacy (+10%), retail & recreation (+10%), and residence (+13%) across all of Indonesia.

Companies and brands from various industries then hastened to create applications to cater to their consumers' demands, following the mobility trend and the increased use of mobile applications. Forbes Technology Council in 2022 mentioned that at least 16 corporate functions and industries would require a mobile application to remain competitive and offer more accessible service. According to TechGenies (2022), creating a mobile application keeps a company updated and at the forefront of cutting-edge technology, strengthens customer relationships, and increases brand loyalty. Additionally, it reduces expenses and increases revenue (Jacinto, 2022). Hence, mobile applications have become a success factor for a business to grow.

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According to data.ai, in 2021, Indonesia experienced incredible growth in the number of hours spent on mobile, with 156 billion hours, increasing 20% Year Over Year (YoY). DataIndonesia.id data indicates that Indonesia held the fifth-largest global market share for mobile applications in 2021. Indonesia thus has a sizable potential market for mobile applications in the next years.

Telkomsel is one of the several businesses that has tapped into this potential by creating its mobile purchase application. MyTelkomsel, a package purchase app from Telkomsel, was made available in 2013 to make it easier for their clients to manage their accounts and contact customer support through smartphones. The app has received 100 million downloads and a 4.5-star rating on Google Play Store. However, the measure of how effective and engaging the app is is not yet known.

Important measures determine how engaging and effective an app is, such as monthly active users (MAU) and total time spent in-app (Tafradzhiyski, 2023), to ensure the consumers' continued intention to use it. The success rate of a mobile application is likewise gauged by those indicators (Erdem, 2022). However, the consumers who are disengaged with the features inside the app and the customers who may not discover the features' value are two of the most frequent challenges experienced in increasing and maintaining the continuation intention to use (Fuchs, 2022). As a result, it could not fully utilize the mobile app's functionality.

One strategy for keeping and retaining current customers is to provide a respectable UX/UI (Osmichenko, 2022). An excellent UI/UX experience significantly impacts the adoption of products and features (Priyanka, 2022). If a customer has a pleasant experience with the brand and the UX/UI of the product is top-notch, they will likely return, according to an article by Alex Osmichenko, CEO and Founder of IT Monks, in 2022. Hence, UX/UI enhances the customer's continued use intention. The customer's continued use intention is crucial in determining how successful a mobile app is. It is the rate at which a mobile application retains consumers for a lengthy period (Grguric, 2023).

Additionally, the retention rate is a key metric for app marketers since it lets them know what percentage of their user base sticks with the app over time in contrast to the number of uninstallers (Tafradzhiyski, 2023). Tafradzhiyski adds that to develop engaging user experiences; that keep current users interested and active and sustain the app's profitability and continuous growth, it is crucial to comprehend the customer's continuance intention to use. It must therefore be maximized.

MyTelkomsel has been seen multiple times employing various tactics to help maximize the continuance intention. One of the examples is when the company uses the promise of amazing rewards to entice customers to use their app and play the game inside of it. In addition, MyTelkomsel has been seen rewarding devoted consumers who have many MyTelkomsel Points from making many in-app purchases of Telkomsel items. MyTelkomsel has also taken advantage of an Instagram account for its promotion. By February 15th, 2023, the account had acquired almost 895 thousand followers. However, it can be seen that there are still many areas that need to be improved because the number of active monthly users of MyTelkomsel was found only to reach 24 million, less than a quarter of the total number of downloads. According to data.ai, MyTelkomsel's position in monthly active users (MAU) has also declined, occupying the 28th position in 2023. Furthermore, according to statistics from data.ai, on February 4, 2023, MyTelkomsel was not even on the list of the top 100 applications in Indonesia regarding the total time spent in-app.

The researcher also conducted preliminary research that shows the reason why customers downloaded the app mostly because it can meet their needs (69.7%), it offers a variety of features (55.5%), someone recommended it to them (27.7%), and it has positive ratings and reviews (11.8%). However, the number of visits is rather low because most customers only use it less than 7 times per week (42%) or once a month (36.1%). When using the application, they typically view data consumption and check how much credit or quota is left (80.7%), purchase Telkomsel packages (69.7%), top-up phone credits (51.3%), redeem

Telkomsel points (26.9%), and check the number of points (25.2%), which are just five of the twelve features offered by MyTelkomsel. These data show a low utilization of the MyTelkomsel application.

This study aims to learn more about the customers' continuance intention to use MyTelkomsel app and identify the variables that affect that intention. Through this research, the author can also contribute to enhancing the Mytelkomsel app and other mobile applications in the telecommunications industry or similar industries. The major components determining the continuance intention to use (CI) mobile service in the telecommunications industry, according to the previous literature's theory by Al-Debei et al. (2022), are mobile service quality which consists of mobile network quality (MNQ), service content quality (SCQ), and customer service quality (CSQ); perceived value (PV); and customer satisfaction (CS).

Mobile service quality has recently received much attention from scholars and practitioners due to its significant impact on customer satisfaction, loyalty, corporate performance, and profitability (Abd-Elrahman, 2020). To succeed in a competitive market, service providers must compete by meeting or exceeding customers' demands and expectations for mobile service quality (Melody, 2001, as referenced in Paulrajan and Rajkumar, 2011). Therefore, based on a previous study (Khan et al., 2017), mobile service quality can be seen as a crucial strategic factor for firms to differentiate their goods and services from those of their rivals.

The "trade-off" between sacrifice and possible consumer benefits, or more specifically, the complex relationship between the service provider and the customer, is where the concept of value originated (Rokeach, 1968, as quoted in Ofori et al., 2021). Perceived value refers to a customer's psychological assessment of a good or service in light of their hopes and expectations (Ali et al., 2015). Understanding user behaviors, such as service uptake and purchasing habits, requires understanding perceived value (Yu et al., 2012).

Customer satisfaction is the consumer's response to fulfillment, which is the conclusion that a good or service provides a satisfying level of consumption-related fulfillment (Oliver, 1997; Brent, 2013; Su et al., 2016; as cited in Zhou et al., 2018). According to Chen and Demirci (2019), it occurs when expectations match, exceed, or fall short of the actual performance of the good or service. Customer satisfaction creates long-term customer relationships, giving the business a competitive advantage (Storbacka et al., 1994, as cited in Khan et al., 2017).

The aim to continue or repeat one's current consumption patterns of products or services is known as continuance intention and is reflected in a person's positive cognitive impulse (Lu, 2014, as referenced in Fauzi & Sheng, 2020). It is connected to satisfaction and other perceived factors (Chen & Demirci, 2019).

The following hypotheses have been developed based on the previously mentioned justifications.

Hypothesis 1: Mobile Network Quality of My Telkomsel App has a positive influence on Perceived Value
Hypothesis 2: The service Content Quality of MyTelkomsel App has a positive influence on Perceived Value
Hypothesis 3: Customer Service Quality of MyTelkomsel App has a positive influence on Perceived Value
Hypothesis 4: The service Content Quality of MyTelkomsel App has a positive influence on Customer Satisfaction
Hypothesis 5: Customer Service Quality of MyTelkomsel App has a positive influence on Customer Satisfaction
Hypothesis 6: Perceived Value of My Telkomsel App has a positive influence on Continuance Intentions
Hypothesis 7: Customer Satisfaction with MyTelkomsel App positively influences Continuance Intentions.

B. RESEARCH METHOD

This research uses the mixed method, where both quantitative and qualitative approaches are conducted. The researcher will conduct semi-structured interviews for the qualitative approach and use a survey for the quantitative approach. The target respondents are male and female who are Gen Z and Millennials who live in Bandung and Jabodetabek area and have downloaded the MyTelkomsel app and

are actively using the app. The number of respondents for the interview is 12 respondents. The findings from the interviews were examined using open coding. The quantitative approach might include additional variables derived from the interview result. However, data validation using the triangulation method is conducted before the variables are tested through a survey.

For the survey, based on a book by Taherdoost (2016), the minimum number of respondents is 241 respondents. The results of the survey were analyzed using PLS-SEM on SmartPLS version 4.0. The variable for the questionnaire was created using the conceptual model created by Al-Debei et al. (2022). A five-point Likert scale is used, with 1 denoting strong disagreement and 5 denoting strong agreement with the statement. The constructs of significance in this study are Continuance Intention to Use (CI), Customer Satisfaction (CS), Perceived Value (PV), Customer Service Quality (CSQ), Service Content Quality (SCQ), and Mobile Network Quality (MNQ). All elements included in the proposed model were operationally described by referring to prior research, as shown in Table 1.

Table 1. Variable Measurement

Variable		Item	Source
Mobile Network Quality	MNQ1	The time required to download the information I require is not that long.	Al-Debei et al. (2022)
	MNQ2	Error rarely occurs in the MyTelkomsel system.	
	MNQ3	MyTelkomsel system is stable and reliable.	
	MNQ4	MyTelkomsel services can immediately respond to the data I input	
Service Content Quality	SCQ1	MyTelkomsel services offer complete content	Al-Debei et al. (2022)
	SCQ2	MyTelkomsel services provide proper content.	
	SCQ3	The content on MyTelkomsel services is consistently updated.	
	SCQ4	The display of MyTelkomsel services is seamless.	
Customer Service Quality	CSQ1	MyTelkomsel provides a variety of services	Al-Debei et al. (2022)
	CSQ2	MyTelkomsel offers a variety of tariff alternatives in terms of services.	
	CSQ3	MyTelkomsel can quickly address any service-related issues that may arise.	
	CSQ4	MyTelkomsel provides good services.	
Perceived Value	PV1	The use of MyTelkomsel services would offer good value for the money I need to pay	Al-Debei et al. (2022)
	PV2	MyTelkomsel services would benefit me compared to the effort I have to put in.	
	PV3	Using MyTelkomsel services would be worthwhile for the time I need to spend.	
	PV4	Overall, the use of MyTelkomsel services would bring me good value.	
Customer Satisfaction	CS1	I like to use MyTelkomsel services	Al-Debei et al. (2022); Chen & Demirci (2019)
	CS2	I feel very satisfied with my overall experience using MyTelkomsel services.	
	CS3	I feel very pleased with my overall experience using MyTelkomsel services.	
	CS4	I think the decision to use MyTelkomsel services is wise.	
Continuance Intention to Use	CI1	I intend to continue using MyTelkomsel services rather than discontinue its use.	Al-Debei et al. (2022); Chen & Demirci (2019)
	CI2	I will keep using MyTelkomsel services in the future as regularly as I do now.	
	CI3	I intend to increase the frequency of use for MyTelkomsel services in the future if there is an improvement in the MyTelkomsel application.	
	CI4	I will try to use MyTelkomsel services in my daily life in the future.	
	CI5	I have the intention to explore more about MyTelkomsel features in the future.	

Source: research data, 2023

Descriptive and statistical evaluations are performed on the acquired data. The statistical analysis is divided into two stages. The outer model, or measurement analysis, takes place in the first stage, while the structural or internal model analysis occurs in the second.

The following additional hypotheses have been developed based on the previously mentioned justifications.

Hypothesis 8: Perceived Usefulness has a positive influence on Continuance Intentions to Use MyTelkomsel app

Hypothesis 9: Perceived Ease of Use has a positive influence on Continuance Intentions to Use MyTelkomsel app

Table 2. Additional Variable Measurement

Variable		Item	Source
Perceived Usefulness	PU1	MyTelkomsel makes the process of buying and paying for internet/credit/entertainment packages more efficient.	Chong (2013)
	PU2	I feel MyTelkomsel is very useful in my daily life.	
	PU3	I benefit greatly from using MyTelkomsel, especially in fulfilling my communication needs.	
Perceived Ease of Use	PE1	Learning and understanding how to use MyTelkomsel is easy for me	Chong (2013); Shang & Wu (2017)
	PE2	MyTelkomsel is very easy to use and manage.	
	PE3	MyTelkomsel makes it easy to complete financial transactions during the product-purchasing process.	

Source: research data, 2023

C. RESULTS AND ANALYSIS

The interview result shows that the respondents had direct experience with the variables in the conceptual framework in this study, which satisfied the data saturation criteria. The repeated statements made by the respondents, which supported the researcher's hypothesis, provided evidence for each variable. The study also found additional factors that satisfy the data saturation criteria: Perceived Usefulness (PU) and Perceived Ease of Use (PE). The degree to which a person believes that using a particular technology will increase their capacity to complete their work is known as perceived usefulness (Davis, 1989). According to a study by Chong, perceived usefulness is one of the important factors influencing consumers' intention to keep using an app. The degree to which a person believes using a particular technology would be simple, according to (Davis, 1989), is the measure of perceived ease of use. According to research by (Chong, 2013; Shang & Wu, 2017), perceived ease of use is one of the most crucial variables influencing customers' intention to continue using an app. This qualitative method is validated using data source triangulation with results from interviews, netnography, and literature reviews. The researcher observed the congruence between the information and the conclusions drawn from these three sources. As a result, it is possible to conclude that the interview results are reliable and can be used as additional variables in this study.

After gathering data survey from 249 male and female respondents from Gen Z and Millenials who live in Bandung and Jabodetabek area and currently are using the MyTelkomsel app, the researcher can conclude the descriptive analysis. Table 3 shows the descriptive analysis of the conceptual model used in this study. The researcher could see that the item with the highest mean score is CSQ4, with a 3.928, showing that the respondents agree that MyTelkomsel has good customer service. The item with the lowest mean score is MNQ2, with a score of 2.301, showing that the respondents disagree that error rarely occurs in the MyTelkomsel system.

The descriptive analysis result above also shows that the item with the highest standard deviation is MNQ1 with a score of 1.462, showing that some respondents agree that downloading the information they need on MyTelkomsel is quite time-consuming, while others disagree. The item with the lowest standard deviation is CS4, with a score of 0.838, showing that the respondents mostly agree with using MyTelkomsel as a wise decision.

Table 3. Descriptive Analysis Result

Variable	Item	Mean	STDEV	MIN-MAX
Mobile Network Quality	MNQ1	2.526	**1.462**	1-5
	MNQ2	**2.301**	1.380	1-5
	MNQ3	2.414	1.403	1-5
	MNQ4	2.546	1.405	1-5
Service Content Quality	SCQ1	3.100	1.193	1-5
	SCQ2	2.904	1.056	1-5

Variable	Item	Mean	STDEV	MIN-MAX
	SCQ3	3.293	0.909	1-5
	SCQ4	2.912	1.038	1-5
Customer Service Quality	CSQ1	3.691	0.885	1-5
	CSQ2	3.538	0.931	1-5
	CSQ3	3.072	0.861	1-5
	CSQ4	**3.928**	1.183	1-5
Perceived Value	PV1	3.028	0.875	1-5
	PV2	3.373	0.906	1-5
	PV3	3.727	0.904	1-5
	PV4	2.888	0.988	1-5
Perceived Usefulness	PU1	3.807	0.971	1-5
	PU2	3.410	1.242	1-5
	PU3	3.466	0.931	1-5
Perceived Ease of Use	PE1	3.317	1.030	1-5
	PE2	3.538	0.918	1-5
	PE3	3.867	0.915	1-5
Customer Satisfaction	CS1	3.687	0.943	1-5
	CS2	3.000	1.079	1-5
	CS3	3.329	0.889	1-5
	CS4	3.695	**0.838**	1-5
Continuance Intention to Use	CI1	3.586	0.954	1-5
	CI2	3.586	1.007	1-5
	CI3	3.530	1.098	1-5
	CI4	3.020	1.092	1-5
	CI5	2.912	1.079	1-5

Source: research data, 2023

The researcher then conducted the statistical analysis. This study uses indicator reliability (IR) and internal consistency reliability (ICR) values to test the data's reliability. According to Hair et al. (2019), in IR, loadings should be 0.7 or higher since they demonstrate that the variable explains more than 50% of the variance of the item, leading to appropriate item dependability. As a result, the researcher would remove the item with an outer loading lower than 0.7, which is CI3, which has an outer loading of 0.532.

Table 4. Indicator Reliability Result

Variable	Item	Mean	Reliability
Mobile Network Quality	MNQ1	0.926	Reliable
	MNQ2	0.888	Reliable
	MNQ3	0.946	Reliable
	MNQ4	0.934	Reliable
Service Content Quality	SCQ1	0.869	Reliable
	SCQ2	0.879	Reliable
	SCQ3	0.736	Reliable
	SCQ4	0.846	Reliable
Customer Service Quality	CSQ1	0.801	Reliable
	CSQ2	0.821	Reliable
	CSQ3	0.756	Reliable
	CSQ4	0.700	Reliable
Perceived Value	PV1	0.770	Reliable
	PV2	0.740	Reliable
	PV3	0.703	Reliable
	PV4	0.733	Reliable
Perceived Usefulness	PU1	0.759	Reliable
	PU2	0.849	Reliable
	PU3	0.909	Reliable
Perceived Ease of Use	PE1	0.851	Reliable
	PE2	0.884	Reliable
	PE3	0.762	Reliable

Variable	Item	Mean	Reliability
Customer Satisfaction	CS1	0.749	Reliable
	CS2	0.729	Reliable
	CS3	0.828	Reliable
	CS4	0.746	Reliable
Continuance Intention to Use	CI1	0.768	Reliable
	CI2	0.734	Reliable
	CI3	0.532	Unreliable
	CI4	0.848	Reliable
	CI5	0.766	Reliable

Source: research data, 2023

For ICR to pass the reliability test, Wong (2013) m that composite reliability must be at least 0.7 or higher. Based on Table 5, the ICR result shows that all of the composite reliability scores of each variable have passed above 0.7, which means that all of the variables in this study are reliable.

Table 5. Internal Consistency Reliability Result

Variable	Composite Reliability	Reliability
Mobile Network Quality	0.959	Reliable
Service Content Quality	0.901	Reliable
Customer Service Quality	0.852	Reliable
Perceived Value	0.827	Reliable
Perceived Usefulness	0.879	Reliable
Perceived Ease of Use	0.873	Reliable
Customer Satisfaction	0.849	Reliable
Continuance Intention to Use	0.862	Reliable

Source: research data, 2023

The average variance extracted (AVE) assesses each variable's convergent validity. An AVE of 0.50 or greater, according to Hair et al. (2019), indicates that the variable accounts for 50% or more of the variation of the variable's parts. Table 5's findings allow the researcher to conclude that all variables are valid because all AVE values exceed 0.5.

Table 6. Convergent Validity Result

Variable	AVE (≥ 0.5)
Mobile Network Quality	0.853
Service Content Quality	0.696
Customer Service Quality	0.592
Perceived Value	0.544
Perceived Usefulness	0.708
Perceived Ease of Use	0.697
Customer Satisfaction	0.584
Continuance Intention to Use	0.609

Source: research data, 2023

The researcher then procedd to assess the discriminant validity using the heterotrait-monotrait ratio (HTMT). An HTMT score larger than 0.90 would indicate the absence of discriminant validity, according to Hair et al. (2019). As a result, to pass the discriminant validity test, the scores must be lower than 0.9. All of the HTMT ratios for the variables in this study are less than 0.9, as seen in Table 6. This enables the researcher to conclude that all variables have passed the discriminant validity test.

Table 7. Discriminant Validity Result

	CI	CS	CSQ	MNQ	PE	PU	PV	SCQ
CI								
CS	0.883							
CSQ	0.648	0.806						
MNQ	0.575	0.414	0.246					
PE	0.737	0.741	0.687	0.313				

	CI	CS	CSQ	MNQ	PE	PU	PV	SCQ
PU	0.779	0.837	0.824	0.197	0.854			
PV	0.871	0.897	0.888	0.330	0.755	0.843		
SCQ	0.893	0.814	0.483	0.647	0.706	0.633	0.744	

Source: research data, 2023

Before drawing any conclusions, a thorough analysis is essential due to the likelihood of collinearity. Collinearity is typically indicated by a variance inflation factor (VIF) value of 5 or above, which causes a concern (Hair et al., 2011). Because collinearity between each set of predictor variables is prohibited, the VIF (Variance Inflation Factor) values must all be smaller than 5 (Wong, 2015). All VIF values are less than 5, as seen in Table 7, indicating that all indicators have successfully passed the collinearity test. Thus, the researcher might conclude that there is no multicollinearity among the variables.

Table 8. Collinearity Test Result

Item	Mean
MNQ1	3.759
MNQ2	3.424
MNQ3	4.940
MNQ4	4.284
SCQ1	2.856
SCQ2	2.622
SCQ3	1.462
SCQ4	2.214
CSQ1	1.591
CSQ2	1.851
CSQ3	1.331
CSQ4	1.524
PV1	1.494
PV2	1.517
PV3	1.417
PV4	1.277
PU1	1.424
PU2	1.978
PU3	2.253
PE1	1.624
PE2	1.924
PE3	1.542
CS1	1.731
CS2	1.437
CS3	1.722
CS4	1.741
CI1	1.486
CI2	1.468
CI4	2.813
CI5	2.421

Source: research data, 2023

The researcher will subsequently perform the Goodness of Fit (GoF) analysis. By assessing effect size and convergent validity, GoF produces a metric between 0 and 1 (Garson, 2016). (Wong, 2013) asserts that the square roots of the R^2 and Q^2 average values are multiplied to arrive at the GoF result. The GoF result in this study is 0.351, which suggests that the model can describe the empirical data because the GoF score is above 0.1, as shown in Table 8.

Table 9. The Goodness of Fit Result

Variable	Coefficients of Determination (R2)	Cross-Validated Redundancy (Q2)
Perceived Value	0.589	0.573
Customer Satisfaction	0.595	0.584
Continuance Intention	0.624	0.588
Average	**0.603**	**0.582**
GoF	**0.351**	

Source: research data, 2023

The bootstrapping method tests hypotheses and determines the significance of the path coefficients, which typically have values between -1 and +1. The relationship between the two constructions is more negative; the closer the path coefficients are to -1 and stronger, the closer the path coefficients are to +1 according to (Hidayat, 2021). (Kock; 2016) asserts that if the P-value is less than 0.05, the variable significantly affects the dependent variable.

The hypothesis testing result using the bootstrap method is shown in Table 9. The data shows that H1 is rejected, meaning MNQ has no positive influence on PV (β=0.058, p>0.05). In contrast, H2 is accepted because SCQ positively influences PV (β=0.368, p<0.05). A significant relationship between CSQ and PV is discovered, supporting H3 (β=0.527, p<0.05). SCQ is also found to positively influence CS, suggesting H4 (β=0.519, p<0.05) to be accepted. H5 is accepted because CSQ is discovered to impact CS (β=0.406, p<0.05) positively. The data also shows that H6, H7, H8, and H9 are all should be accepted because PV (β=0.284, p<0.05), CS (β=0.330, p<0.05), PU (β=0.142, p<0.05), and PE (β=0.168, p<0.05) have a significant impact on CI.

Table 10. Hypothesis Testing Result

Hypothesis	Structural Path	Path Coefficient	P-Values	Result
H1	MNQ > PV	0.058	0.354	Rejected
H2	SCQ > PV	0.368	0.000	Accepted
H3	CSQ > PV	0.527	0.000	Accepted
H4	SCQ > CS	0.519	0.000	Accepted
H5	CSQ > CS	0.406	0.000	Accepted
H6	PV > CI	0.284	0.000	Accepted
H7	CS > CI	0.330	0.000	Accepted
H8	PU > CI	0.142	0.041	Accepted
H9	PE > CI	0.168	0.013	Accepted

Source: research data, 2023

The F-square effect size, an independent sample size, describes the amount or strength of an effect. A larger effect size is indicated by an F-square value greater than 0.35. An effect size between 0.15 and 0.35 on the F-square scale is considered medium. An F-square score between 0.02 and 0.15 indicates a small effect size. Therefore, when F-square is less than 0.03, it suggests it has little to no effect (Yahaya et al., 2019). The F-Square Effect Size result is displayed in Table 10. The researcher can conclude that MNQ has no positive influence on PV based on Table 10. Additionally, it can be seen that factors such as CS to CI (F^2 = 0.133), PE to CI (F^2 = 0.038), PU to CI (F^2 = 0.023), and PV to CI (F^2 = 0.100) all have little effect size. SCQ to PV (F^2 = 0.163) and CSQ to CS (F^2 = 0.349) have a medium effect size. Finally, the study found a significant relationship between CSQ and PV (F^2 = 0.513) and SCQ and CS (F^2 = 0.569).

Table 11. F-Square Effect Size

	CI	CS	CSQ	MNQ	PE	PU	PV	SCQ
CI								
CS	0.133							
CSQ		0.349					0.513	
MNQ							0.005	
PE	0.038							
PU	0.023							
PV	0.100							
SCQ		0.569					0.163	

The first hypothesis postulates that the MyTelkomsel app's mobile network quality (MNQ) favorably impacts users' perceived value (PV). However, the path coefficient for H1 is the lowest among the other hypotheses, at 0.058. The p-value for H1 is 0.354, over the significance level of 0.05. The outcome of the data analysis demonstrates that H1 must be disregarded. This finding contrasts with the earlier study by Al-Debei et al. (2022), which discovered a substantial impact of Mobile Network Quality on Perceived Value. The study did note, however, that among the other aspects of mobile service quality, mobile network quality has the smallest effect size.

The second hypothesis postulates that the MyTelkomsel app's service content quality (SCQ) favorably impacts the customers' perceived value (PV). The data analysis used in this study demonstrates that this hypothesis can be accepted because the path coefficient for H2 likewise shows a positive value of 0.368, and the p-value for H2 is 0.000, which is less than the threshold of 0.05 for significance. This finding is consistent with a prior study by Al-Debei et al. (2022), which found that among the other Mobile Service Quality dimensions, Service Content Quality has the largest effect size and positively influences Perceived Value. According to the study, how well the service material is delivered will directly affect how valuable people believe it to be.

According to Hypothesis 3, the MyTelkomsel app's customer service quality (CSQ) favorably impacts how much the customers value the product (PV). The data analysis used in this study demonstrates that this hypothesis can be accepted because the path coefficient for H3 likewise displays a positive value of 0.527, and the p-value for H3 is 0.000, which is less than the threshold of 0.05 for significance. This outcome is consistent with a prior study by Al-Debei et al. (2022), which discovered that Customer Service Quality favorably increases Perceived Value. According to the study, the quality of customer service is directly correlated with the perceived value.

The fourth hypothesis postulates that the Customer Satisfaction (CS) level is favorably influenced by the Service Content Quality (SCQ) of the MyTelkomsel app. The data analysis used in this study demonstrates that this hypothesis can be accepted because the path coefficient for H4 likewise displays a positive value of 0.519, and the p-value for H4 is 0.000, which is less than the threshold of 0.05 for significance. This finding is consistent with a prior study by Al-Debei et al. (2022), which found that Service Content Quality has the largest effect size, which indicates that it is only slightly more significant than the impact of Customer Service Quality on Customer Satisfaction.

According to Hypothesis 5, the MyTelkomsel app's customer service quality (CSQ) favorably impacts customer satisfaction (CS). The data analysis used in this study demonstrates that this hypothesis can be accepted because the path coefficient for H5 also displays a positive value of 0.406, and the p-value for H5 is 0.000, which is less than the significance level of 0.05. According to a prior study by Al-Debei et al. (2022), customer service quality considerably impacts customer satisfaction. This result is consistent with that finding.

Hypothesis 6 proposes that MyTelkomsel app users' perceived value (PV) has a favorable impact on their intention to continue using the app (CI). Since the p-value for H6 is 0.000, which is less than the significance level of 0.05, and the path coefficient of H6 also displays a positive number of 0.284, the data analysis used in this study demonstrates that this hypothesis can be accepted. This finding is consistent with earlier research by Wang et al. (2020) and Al-Debei et al. (2022), which found that perceived value significantly affects customers' intentions to continue using a product.

According to Hypothesis 7, customer satisfaction (CS) with the MyTelkomsel app has a favorable impact on users' intentions to continue using it (CI). The data analysis used in this study demonstrates that this hypothesis can be accepted because the path coefficient for H7 also displays a positive value of 0.330, and the p-value for H7 is 0.000, which is less than the threshold of 0.05 for significance. The outcome also demonstrates that, among the other variables that favor the Continuance Intention to Use, Customer Satisfaction has the biggest effect size ($F^2 = 0.133$). This finding is consistent with other research by Al-

Debei et al. (2022), Chen & Demirci (2019), and Ofori et al. (2021), which showed that customer satisfaction increases customers' intentions to continue favorably using a product. Additionally, Customer Satisfaction was found to have a more significant impact on continued usage intentions than perceived value, per Al-Debei et al. (2022).

Hypothesis 8 assumes that customers' perceptions of the app's usefulness (PU) favorably impact their intention to continue using it (CI). The data analysis used in this study demonstrates that this hypothesis can be accepted because the path coefficient for H8 also shows a positive value of 0.142, and the p-value for H8 is 0.041, which is less than the threshold of 0.05 for significance. This outcome is consistent with earlier research by Chong (2013), who found that perceived usefulness is one of the important factors influencing users' intentions to continue using an app.

According to Hypothesis 9, the consumers' perceived ease of use (PE) of the MyTelkomsel app influences their future intentions to continue using it (CI). Since the p-value for H9 is 0.013, which is less than the significance level of 0.05, and the path coefficient of H9 also displays a positive number of 0.168, the data analysis used in this study demonstrates that this hypothesis can be accepted. This finding is consistent with earlier research by Chong (2013) and Shang & Wu (2017), which showed that perceived ease of use plays a key role in keeping app users engaged and is one of the most crucial variables determining customers' intention to stay with the app.

D. CONCLUSION

This study evaluates the variables that have a major impact on customers' intentions to continue using the MyTelkomsel app and determines how those influencing factors change those intentions. This study found that while Mobile Network Quality has no positive impact on Perceived Value, Service Content, and Customer Service Quality both have considerable effects. Furthermore, due to its bigger effect size than Service Content Quality, Customer Service Quality is found to be a more significant influence on Perceived Value. On the other hand, Service Content Quality has a more significant impact on Customer Satisfaction since it has a greater effect size than Customer Service Quality. Customer Satisfaction might vary by 59.5% depending on the criteria, Service Content Quality, and Customer Service Quality.

In addition, it has been demonstrated that the four variables directly linked to Continuance Intention to Use are all significant factors. Customer Satisfaction, Perceived Value, Perceived Usefulness, and Perceived Ease of Use account for 62.4% of Continuance Intention to Use variance. Further research reveals that Customer Satisfaction ($F^2 = 0.133$) had the biggest effect size, followed by Perceived Value ($F^2 = 0.100$), Perceived Ease of Use ($F^2 = 0.038$), and Perceived Usefulness ($F^2 = 0.023$).

Decision-makers may benefit from this study on the variables influencing the customer's intention to use mobile apps as they create and develop strategies for their apps. According to the results, companies must ensure that their customers are satisfied with the mobile application and that their expectations are fulfilled. These two components will eventually entice users to continue using the mobile app. Customer satisfaction continues to be one of the key variables affecting customers' intention to use a mobile app service in the future. The researcher has also contributed by creating a conceptual model that is considered suitable for examining the context of Continuous Intention to Use mobile applications for the telecommunication industry in future research.

Future research ought to seek a variable other than customer satisfaction, perceived ease of use, perceived usefulness, and perceived value that may have a greater impact on a customer's intention to continue using a product. Another recommendation is to extend the age and domicile variance in the demographic profiles of respondents and achieve a wider coverage area to gain the answer variances required to produce the analysis's findings. A bigger sample size is also advised to acquire more accurate research results representing the study's subject. Finally, it would be even better if future research looked at

using mobile apps from other providers as objects to compare them and learn more about consumers' long-term intention to use telecom mobile apps.

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