

Continue Use Intention Analysis Using The Integration Of The Unified Theory Of Acceptance And Use Of Technology (UTAUT) 2 And Delone & Mclean (D&M) Models Modified In The My Telu Mobile Student Account Application

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Abstract.

My TelU Mobile is a learning support application released by Telkom University on May 25, 2021. This application can be downloaded on the Play Store and App Store and has become a super app that has quite a high number of downloads. However, its user traffic is not yet stable, as seen in the decreasing usage traffic during the lecture period. The purpose of this study was to determine the factors that influence the acceptance and use of the My TelU Mobile application using an integration of the UTAUT-2 and Delone & McLean models. This study uses a quantitative method with descriptive and causal research types. The sampling technique uses a non-probability sampling technique of the purposive sampling type with a sample size of 400 respondents. The data analysis technique uses descriptive analysis and PLS. The findings of this study are that effort expectancy, information quality, service quality, user satisfaction have a significant effect on continue use intention and system quality, information quality, service quality have a significant effect on user satisfaction. However, performance expectancy, social influence, facilitating condition, habit, hedonic motivation, and system quality do not have a significant effect on continue use intention of My TelU Mobile application.

Keywords: *Super App, Unified Theory of Acceptance and Use of Technology (UTAUT) 2, Delone & McLean (D&M), and Partial Least Square (PLS).*

I. INTRODUCTION

The development of information technology in the 21st century is one of the most significant phenomena because it is marked by the spread of the industrial revolution 4.0. Technological developments in the industrial revolution 4.0 gave rise to a new phenomenon, namely the growth in the number of internet users and mobile phone users throughout the world and one of the countries affected by this phenomenon is Indonesia. Reporting from the We Are Social and Hootsuite (2023), the number of internet users in Indonesia has reached 213 million people as of January 2023. The same report also states that 98.3% of internet users connect via mobile phones or the equivalent of 209.38 million people. Indonesian population [1]. The total number of mobile operating system users in Indonesia is dominated by Android reaching 88.75% of users and in second place is iOS (Iphone) reaching 11.09% of users in August 2023. This indicates that mobile technology designed by certain institutions needs to facilitate the Android operating system. and iOS because these operating systems are used by the majority of the Indonesian population.[2]In the digital era, the concept of applications has undergone a transformation. One of the striking changes is the super app concept, namely a platform that combines various services in one container, giving users unlimited access to features that can be tailored to the user's wishes [3].

One of the higher education institutions that has utilized super apps in the world of education is Telkom University. One of the applications created is My TelU Mobile, using the Android and iOS operating systems. My TelU Mobile is an application built on the Telkom University campus environment with a super app concept focused on accommodating the various needs of the academic community within Telkom University, including students, lecturers, staff, alumni and parents, but for now the focus of its use is on students, lecturers and employees [4]. Currently, My TelU Mobile has been downloaded by 93% of active students (January, 2024), but of all the downloaders they have not used it continuously (continue use intention). Apart from that, there are quite a lot of complaints that occur on services related to usage which are written from reviews of the Play Store and App Store to ratings on the Play Store and App Store which are still low compared to similar applications from several universities as well as ticketing data related to

problems which have increased in the last year, making the team My TelU Mobile must start fixing the most crucial variables that can make users want to use the service continuously.

II. METHODS

This research uses descriptive quantitative research methods to determine the variables that influence user acceptance of the My TelU Mobile application. The aim of this research is conclusive or causal which analyzes the relationship between variables and the object under study in the nature of cause and effect. The data collection method uses a questionnaire, and looks at the implementation time on a cross-sectional basis, meaning that the data collection process takes place over time, with the data being processed, evaluated and conclusions drawn. The research population this time consisted entirely of active Telkom University students. For the sample, a purposive sampling technique was used with a non-probability sampling type where the researcher determined the sample criteria from the existing population, namely population data, and samples were collected from all active Telkom University students, totaling 400 respondents. This research uses partial least squares (PLS) analysis techniques which aim to test the predictive relationship between constructs (X to Y) by seeing whether there is a relationship or influence between these constructs. Model evaluation in PLS consists of two stages, namely the outer model and inner model [5].

The outer model assesses the relationship between latent variables by assessing convergent validity and discriminant validity. Convergent validity is related to the principle that the measures of a construct should be highly correlated with the measured values of the loading factor and average variance extracted [6]. Discriminant validity is related to the principle that measures of different constructs should not be highly correlated with measured values in cross loading, composite reliability, and Croanbach's alpha [6]. Meanwhile, the inner model predicts causal relationships between latent variables or variables that cannot be measured directly. The inner model is evaluated through R2, Q-Square, effect size (F2), and goodness of fit (GoF). Hypothesis testing uses path coefficient and t-statistic values to show the influence and level of significance in hypothesis testing.

III. RESULT AND DISCUSSION

This research observed 400 Telkom University students who used the My TelU Mobile application. The respondents were 46% male and 54% female, with the largest age group being 19-20 years (74%). For the majority of respondents from the 2023 college class, namely 39%, the largest source of information about applications came from introduction to campus life activities for new students (PKKMB) with 291 respondents (73%). The highest frequency of application use is more than twice a week, namely 41%.

Outer Model

Evaluation outer model is an evaluation of the tools used for collect research data. This evaluation is used to determine validity and the reliability of data collection tools. Outer model or measurement model using test convergent validity, discriminant validity and reliability.

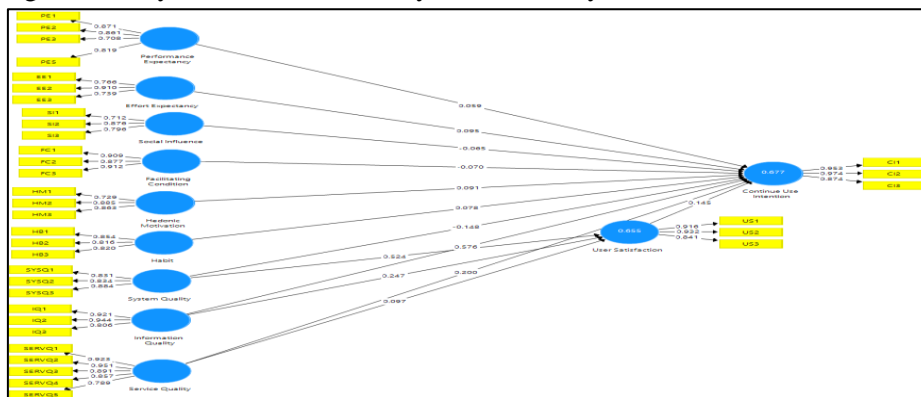


Fig. 1. Measurement Model Test

Based on the picture above, the loading factor value can be seen, so the result is that all indicators/items have a loading factor value > 0.7 so they can be declared valid.

Inner Model

The second test carried out was the inner model test. The inner model test has 4 types of evaluation carried out, namely R-square, Qsquare, effect size, and path coefficient, using the help of the SmartPLS application.

Table 1. R-Square Value

Variable Item	R-Square
User Satisfaction	0,677
Continue Use Intention	0,655

Based on the table above, the r-square value for the user satisfaction variable is 0.677 which can be stated to be in the good category, this shows that 67.7% of the influence contribution is from the system quality, information quality and service quality variables, while the rest amounting to 32.3% is a contribution to user satisfaction outside of this research. Furthermore, the r-square value for the continuity use intention variable was obtained at 0.655 which can be stated to be in the medium category. This shows that 65.5% of the influence contribution is from the variables performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, habit, hedonic motivation, system quality, information quality, and service quality, while the remaining 34.5% is a contribution to continuity of use intention outside of this research.

Table 2. Q-Square Value

Variable Item	Q-Square
User Satisfaction	0,519
Continue Use Intention	0,582

Based on the table above, it shows that the largest Q-square results are the continuity use intention variable of 0.582 or 58.2%, and user satisfaction of 0.519 or 51.9%, so it can be concluded that the value of the continuity use intention and user satisfaction variables has predictive relevance value.

Table 3. Goodness of Fit

Parameter	Saturated Model	Estimated Model
User Satisfaction	0,082	0,085
Continue Use Intention	0,580	0,570

Based on the table above, the SRMR value is 0.082 < 0.10 and the NFI value is 0.580 (between 0 and 1). This shows that the measurement and structural model in this research meets the suitability criteria so that the model can be used and is good at describing the relationship between variables.

Hypotesis Result

Table 4. Hypotesis Test Result

Hypotesis	Connection	Information
H1	PE -> CI	Rejected
H2	EE -> CI	Accepted
H3	SI -> CI	Rejected
H4	FC -> CI	Rejected
H5	HM -> CI	Rejected
H6	HB -> CI	Rejected
H7a	SYSQ -> CI	Rejected
H7b	SYSQ -> US	Accepted
H8a	IQ -> CI	Accepted
H8b	IQ -> US	Accepted
H9a	SERVQ -> CI	Accepted
H9b	SERVQ -> US	Accepted
H10	US -> CI	Accepted

The results of calculating the performance expectancy variable on continue use intention have an influence figure of 0.059, a t-statistic figure of 1.053 and a p-value of 0.293. Based on these figures, testing performance expectancy on continued use intention on the My TelU Mobile application does not have a significant effect. These results show that the performance expectancy variable has a very small influence, in contrast to the majority of research which always finds that the performance expectancy variable has a significant effect on continue use intention, such as research by Malewar & Bajaj, 2020; Soren & Chhakraborty, 2024; Barata & Coelho, 2021. However, the results of this research are in line with what was

found by Fanani et al (2018) that students have not been helped when using the My TelU Mobile application. Even though based on table 4.1 the descriptive assessment figures for the performance expectancy variable in this case are quite high because they have an average score of 74.1%, it is felt that these variables do not have a significant influence on users of the My TelU Mobile application. The results of calculating the performance expectancy variable on continue use intention have an influence figure of 0.095, a t-statistic figure of 2.221 and a p-value of 0.027. Based on these figures, testing effort expectancy on continue use intention on the My TelU Mobile application has a significant effect. These results show that the effort expectancy variable has a big influence, as in research by M et al, 2021. It can be concluded that in this research the My TelU Mobile application users are easy to use.

The results of calculating the social influence variable on continue use intention have an influence figure of -0.065, a t-statistic figure of 1.098 and a p-value of 0.273. Based on these figures, testing social influence on continued use intention on the My TelU Mobile application does not have a significant effect. These results show that the social influence variable has a very small influence, in contrast to the majority of research which always finds that the social influence variable has a significant effect on continue use intention, such as research by Kania et al, 2022; Shen, 2023; Bhattacharyya et al, 2021. However, the results of this research are in line with what was found by M et al, (2021) that social influence or influence from people around them is not a determining factor for students in using the My TelU Mobile application. Even though based on table 4.3 the descriptive assessment figures for the social influence variable in this case are quite high because it has an average score of 83.1%, it is felt that these variables do not have a significant influence on users of the My TelU Mobile application. The results of calculating the facilitating condition variable on continue use intention have an influence figure of -0.070, a t-statistic figure of 1.298 and a p-value of 0.195. Based on these figures, testing facilitating conditions on continue use intention on the My TelU Mobile application does not have a significant effect. These results show that the facilitating condition variable has a very small influence, in contrast to research by M et al, 2021. which found that the facilitating condition variable has a significant effect on continue use intention. However, the results of this research are in line with what Santoso (2024) found that the condition of the facilities is not a factor in influencing the intention to use the My TelU Mobile application. Even though based on table 4.4 the descriptive assessment figures for the facilitating condition variable in this case are quite high because they have an average score of 74%, it is felt that these variables do not have a significant influence on users of the My TelU Mobile application.

The results of calculating the hedonic motivation variable on continue use intention have an influence figure of 0.091, a t-statistic figure of 1.396 and a p-value of 0.163. Based on these figures, testing hedonic motivation on continue use intention on the My TelU Mobile application does not have a significant effect. These results show that the hedonic motivation variable has a very small influence, in contrast to research by M et al, 2021 which found that the hedonic motivation variable has a significant effect on continue use intention. However, the results of this research are in line with what Santoso (2024) found that hedonic motivation is not a factor in influencing intentions to use the My TelU Mobile application. Even though based on table 4.5 the descriptive assessment figures for the hedonic motivation variable in this case are quite high because it has an average score of 75.7%, it is felt that these variables do not have a significant influence on users of the My TelU Mobile application. The results of calculating the habit variable on continue use intention have an influence figure of 0.078, a t-statistic figure of 1.633 and a p-value of 0.103. Based on these figures, habit testing on continued use intention on the My TelU Mobile application does not have a significant effect. These results show that the habit variable has a very small influence, in contrast to research by M et al, 2021 which found that the habit variable has a significant effect on continue use intention. However, the results of this research are in line with what Santoso (2024) found that habitual conditions are not a factor in influencing intentions to use the My TelU Mobile application. Even though based on table 4.6 the descriptive assessment figures for the habit variable in this case are quite high because they have an average score of 76.7%, it is felt that these variables do not have a significant influence on users of the My TelU Mobile application.

The results of calculating the system quality variable on continue use intention have an influence figure of -0.0721, a t-statistic figure of 1.388 and a p-value of 0.166. Based on these figures, system quality testing on continued use intention on the My TelU Mobile application does not have a significant effect. These results show that the system quality variable has a very small influence, in contrast to research by M et al, 2021 which found that the system quality variable has a significant effect on continue use intention. However, the results of this research are in line with what Santoso (2024) found that system quality is not a factor in influencing the intention to use the My TelU Mobile application. Even though based on table 4.7 the descriptive assessment figures for the system quality variable in this case are quite high because it has an average score of 82.4%, it is felt that these variables do not have a significant influence on users of the My TelU Mobile application. The results of calculating the system quality variable on user satisfaction have an influence figure of 0.524, a t-statistic figure of 7.949 and a p-value of 0.000. Based on these figures, system quality testing on user satisfaction on the My TelU Mobile application has a significant effect. These results show that the system quality variable has a big influence, as in research by M et al, 2021. It can be concluded that in this study My TelU Mobile application users were satisfied with the quality of the My TelU Mobile application system.

The results of calculating the information quality variable on continue use intention have an influence figure of 0.612, a t-statistic figure of 9152 and a p-value of 0.000. Based on these figures, testing information quality on continued use intention on the My TelU Mobile application has a significant effect. These results show that the information quality variable has a big influence, as in research by M et al, 2021. It can be concluded that in this research users of the My TelU Mobile application will continue to use the application because it has quality information. The results of calculating the information quality variable on user satisfaction have an influence figure of 0.247, a t-statistic figure of 3.841 and a p-value of 0.000. Based on these figures, testing information quality on user satisfaction on the My TelU Mobile application has a significant effect. These results show that the information quality variable has a big influence, as in research by M et al, 2021. It can be concluded that in this study users of the My TelU Mobile application felt satisfied with the quality of information. The results of calculating the service quality variable on continue use intention have an influence figure of 0.214, a t-statistic figure of 3.907 and a p-value of 0.000. Based on these figures, testing service quality on continued use intention on the My TelU Mobile application has a significant effect. These results show that the service quality variable has a big influence, as in research by M et al, 2021. It can be concluded that in this research users of the My TelU Mobile application will continue to use the application because it has quality service.

The results of calculating the service quality variable on user satisfaction have an influence figure of 0.097, a t-statistic figure of 2.414 and a p-value of 0.016. Based on these figures, service quality testing on user satisfaction on the My TelU Mobile application has a significant effect. These results show that the service quality variable has a big influence, as in research by M et al, 2021. It can be concluded that in this study users of the My TelU Mobile application felt satisfied with the quality of service. The results of calculating the user satisfaction variable on continue use intention have an influence figure of 0.145, a t-statistic figure of 2.440 and a p-value of 0.015. Based on these figures, testing user satisfaction on continued use intention on the My TelU Mobile application has a significant effect. These results show that the user satisfaction variable has a big influence, as in research by M et al, 2021. It can be concluded that in this research users of the My TelU Mobile application will continue to use the My TelU Mobile application because they are satisfied with the quality of the system, services and information provided by the application.

IV. CONCLUSION

Based on the findings of the research, that involved collecting data using questionnaires, processing the data using Smart PLS 3, and conducting analysis of the data, the author can draw conclusions that answer the research questions provided in this study. According to the findings, based on research findings which include collecting data using a questionnaire, processing data using Smart PLS 3, and conducting data analysis, the author can draw conclusions that answer the research questions given in this study. According

to these findings, effort expectancy, information quality, service quality, and user satisfaction have a descriptive analysis that is in accordance with the significance test on continue use intention, namely it is felt to be good and has a significant effect and system quality, information quality, service quality also has a descriptive analysis that is in accordance with the test. The significance of user satisfaction is that it feels good and has a significant effect. However, performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and habit have good descriptive analysis but do not have a significant effect. This is because there are still several indicators of low assessment on this variable, such as there are still similar applications that can be used other than My TelU Mobile so that users feel they are not yet effective, applications that they feel have not been able to improve the user's self-image, applications that they feel have not been updated with features and information. newest, an application that users don't find exciting, so users don't get addicted to using it.

V. ACKNOWLEDGMENTS

The researcher suggests that the central information technology directorate that handles the My TelU Mobile application can improve existing features and add new features that can support student lecture activities so that expectations regarding the application can be further increased and the central information technology directorate can collaborate with the directorate. others to improve the user's self-image. For example, collaborating with the student section to announce the owner of the most Academic Activity Transcripts (TAK), or you can collaborate with the faculty section to inform outstanding students from their faculty.

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