Information Technology and Systems
e-ISSN: 3031-1187
Homepage: https://sanscientific.com/journal/index.php/its
2(1) 43-51 (2024)
https://doi.org/10.58777/its.v2i1.302

Research Article

Analysis of TIX ID Application User Satisfaction in Depok City Using the End User Computing Satisfaction (EUCS) Method

Afri Wahyu Wirdiyanto
Information Technology, Engineering and Informatics, Bina Sarana Informatics University, Indonesia

Received: September 2024; Accepted: November 2024

Abstract
TIX ID is an official application from PT Nusantara Elang Sejahtera, and was released to meet the needs of users among the people of Depok. The purpose of this study is to find out whether there is an influence of content, accurancy, format, ease of use and timeliness on the satisfaction of TIX ID application users and to find out whether there is an influence on the level of satisfaction of TIX ID application users as a medium for booking cinema tickets. The method used in this study is End User Computing Satisfaction (EUCS) which consists of five factors, namely: content, accuracy, form, ease of use, and timeliness. The data collection process was carried out by distributing questionnaires to people who use the TIX ID application in Depok. The sampling technique uses random sampling. The data processing method carried out in this study uses validity tests, reliability tests, and hypothesis tests processed using SPSS software. The results of hypothesis testing there are 4 variables that have an effect, namely accuracy, format, ease of, timeliness and there is 1 variable that has no effect, namely content. Based on the correlation analysis, R2 of 0.657 showed that the satisfaction variable could be explained by the variables content, accuracy, format, ease of use and timeliness of 65.7%.

Keywords: EUCS (End User Computing Satisfaction); Method Satisfaction Analysis; TIX ID application; User Satisfaction;

How to cite: Wirdiyanto. A. W, 2024, Analysis of TIX ID Application User Satisfaction in Depok City Using the End User Computing Satisfaction (EUCS) Method, *Information Technology and Systems (its) 2(1)*, 43-51

*Corresponding author: Afri Wahyu Wirdiyanto (afriw239@gmail.com)

1. Introduction

In today's digital era, technology-based application services are increasingly important in meeting people's needs, including in booking entertainment tickets such as movies, concerts, and other events. TIX ID, as one of the online-based ticket booking applications, has become a solution for users to simplify the ticket buying process quickly and efficiently. Ease of use, quality of information, and speed of access are the main factors that affect the level of user satisfaction of this application.

However, to maintain user loyalty, it's important to understand their level of satisfaction with the app. Research on user satisfaction often uses the End User Computing Satisfaction (EUCS) method, which includes dimensions such as content, accuracy, format, ease of use, and response time. The EUCS

method consists of five independent variables, namely content, accuracy, form, ease of use and timeliness, and one bound variable, namely satisfaction (Saputra & Kurniadi, 2019). The definition of End User Computing Satisfaction of an information system is the overall evaluation of the users of the information system based on their experience in using the system (Saputri & Alvin, 2020). This method provides a comprehensive framework for evaluating the user experience in using technology-based systems.

Depok City, as one of the regions with rapid technological development, has quite significant TIX ID users. Therefore, user satisfaction analysis in this region is important to know the extent to which the TIX ID application meets user expectations, as well as to provide recommendations for service improvement.

The research gap of this study is the limited geographical focus, previous studies often measured application user satisfaction nationally or in a wide area without paying attention to differences in local characteristics. Depok City, as one of the urban areas with rapid technological growth, has user characteristics that may be different compared to other regions. The research focuses on the local context, providing more specific insights into the needs and expectations of users in the city.

The End User Computing Satisfaction (EUCS) method is often used to assess a company's information system or business application. In the research conducted by (Darwati, 2022). However, the implementation of this method for entertainment-based applications such as TIX ID is still limited. This creates a gap in research that can be filled by evaluating user satisfaction of EUCS-based entertainment applications, which include dimensions such as ease of use, information quality, and response time.

The lack of research on ticket booking applications in Indonesia is the main focus, namely on user satisfaction evaluation. such as research conducted by (Ramadhani et al., 2023) this research aims to improve the quality of SINTAP UNAMA website services and as a suggestion for developers. Most research only highlights the functional aspects of the app without exploring how those factors affect the overall user experience and satisfaction (Ramadhani et al., 2023). Many studies only measure overall user satisfaction without deepening each of the EUCS dimensions, such as research conducted by (Handrianto & Pratama, 2024) this research was conducted to find out how satisfied users are with the Jaksehat application.

Previous research often only provides descriptive analysis without providing specific strategic recommendations to improve user satisfaction. The study has the opportunity to provide relevant and applicable recommendations for TIX ID developers, such as user interface (UI/UX) improvements, feature updates, or customer service improvements.

Therefore, this study seeks to fill the gap, namely by focusing on the context of location in Depok City, applying the EUCS method in the context of entertainment applications such as TIX ID, evaluating the satisfaction dimension in depth, and providing strategic recommendations based on research findings. This study aims to analyze the satisfaction of TIX ID application users in Depok City using the EUCS method. The results of the research are expected to provide insight into the strengths and weaknesses of their services, as well as help design more effective strategies to improve the user experience.

2. Literature Review

User Satisfaction in Information Systems

User satisfaction is one of the main indicators of the success of information systems or technology-based applications (Hidayatullah et al., 2020). Study by (Amalia & Azizah, 2022) the Information Systems Success Model shows that system quality, information quality, and user satisfaction contribute directly to the benefits that users feel. The End User Computing Satisfaction (EUCS) method, developed by (Yazid et al., 2019), is one of the popular approaches to measuring end-user satisfaction through five key dimensions: content, accuracy, format, ease of use, and response time.

End User Computing Satisfaction (EUCS)
The EUCS method has been widely used in various studies to evaluate user satisfaction with information systems (Novita & Helena, 2021). According to (Anggraini, 2022), EUCS offers a framework that allows for measurable evaluation of user interactions with technology. Research (Yang & Sihotang, 2022) found that the EUCS method is effective for evaluating web-based systems in the context of e-commerce. Then (Golo et al., 2021) correlates the EUCS dimension with the success rate of the system, especially in management-based applications. However, research that specifically applies EUCS to entertainment-based applications or online ticketing services such as TIX ID is still limited, thus opening up opportunities for further research.

Study on Ticket Booking Apps
App-based ticketing services are increasingly popular in the digital era. Research by (Felix et al., 2024) highlighting the importance of service quality, user interface design (UI/UX), and system reliability as factors that affect user satisfaction of ticketing applications. However, this study still does not pay attention to the influence of individual satisfaction dimensions as measured using EUCS. Moreover, (Andini, 2024) conducted research on ticket booking applications in Indonesia and found that ease of access and service speed are the main elements in improving the user experience.

Challenges and Opportunities in Increasing User Satisfaction
Although apps like TIX ID offer convenience for users, some studies reveal challenges that are often faced, such as: Studies by (Agustin & Zayyan, 2024) shows that technical glitches such as slow response times can significantly lower user satisfaction levels. According to (Fitrianovita, 2023), Inconsistent information quality can lead to user distrust of application services. This study provides an opportunity to evaluate how applications such as TIX ID can mitigate these challenges through an EUCS-based approach.

Related research in Depok City
Research on the use of technology in Depok City shows that the city has a high rate of technology adoption, especially among the younger generation. Study by (Alfian et al., 2024) shows that technology-based applications in Depok need to adapt their services to local needs, such as support for digital payments and ease of interface.

From the existing literature, it can be seen that EUCS is a relevant method to evaluate user satisfaction of technology-based applications, including TIX ID. However, research that integrates EUCS with the context of ticket booking applications, especially in specific areas such as Depok City, is still minimal. This research has the potential to provide new insights into how the dimensions of EUCS affect the user experience in entertainment-based applications.

3. Methods
The EUCS (End User Computing Satisfaction) method is a method to measure end-user satisfaction with an information system. This research was conducted using a quantitative method. The stages of research carried out by the researcher are as follows:

Problem Identification
As an initial stage of research, the identification of problems in this study is based on user reviews of the TIX ID application on the Google Play Store. By identifying these issues, the TIX ID app development team can take the right steps to improve the quality of the app and provide a better user experience.

Literature Studies
In the second step of this study, the researcher searched for and studied literature related to the research topic. This includes scientific articles, books, journals and previous research that can be linked to be used as references, "such as End User Computing Satisfaction (EUCS) methods and user satisfaction.

Instrument Preparation
The third step in this study, the researcher compiled an instrument with a questionnaire using a google

form and then distributed to the respondents of the Depok community to be tested for validation and reality.

Data Collection
The fourth step in this study is data collection, divided into two categories: primary data and secondary data. Primary data is information obtained from responses to questionnaires that have been distributed to respondents, while secondary data is information obtained from previous research using the End User Computing Satisfaction (EUCS) method.

Data Analysis
The fifth step in this study is data analysis. A process that involves processing data to generate relevant new information. In data analysis, the methods used include the F test, the T test and the Coefficient of Determination test. Through this method, the data can be statistically analyzed to test the relationship between the variables, significance, and the degree of strength of the relationship.

Drafting conclusions and suggestions
The last step in this study is to compile the conclusion of the research results and make suggestions for further research.

4. Results

The questionnaire used, the results of the research, and the analysis of the thesis entitled Analysis of TIX ID Application User Satisfaction in Depok City Using the End User Computing Satisfaction (EUCS) Method. Variable X of this study is the variables in the EUCS Method consisting of Content (X_1), Accuracy (X_2), Format (X_3), Ease of Use (X_4), and Timeliness (X_5). Meanwhile, the Y Variable in this study is User Satisfaction (Y) which is the User Satisfaction of the TIX ID application.

Normality Test
The purpose of the normality test is to check whether a group of data or variables is normally distributed. Table 1 briefly explains the results of the data normality test used in this study. This table shows the Kolmogorov-Smirnov (K-S) and Sig. (2-tailed) values. This helps test the normality of your data. It can be shown in the following table 1:

Table 1. Normality Test

N		**100**
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.25419163
Most Extreme Differences	Absolute	.102
	Positive	.050
	Negative	-.102
Test Statistics		.102
Asymp. Sig. (2-tailed)[c]		.011
Monte Carto Sig. (2-tailed)d	Sig.	.008
	99% Confidence Interval	.013

Multicollinearity Test
The multicollinearity test is used to test whether the independent variables are highly correlated or perfect with the regression model. The symptoms of multicollinearity can be known in the research data when there is a high correlation between independent variables. In Table 4, the results of the multicollinearity test show that there is a correlation between variables used in the research of the TIX ID application. Table 2 explains the correlation coefficient and tolerance value between variables to test the level of multicollinearity in the data, which can be seen in the following table 2:

Table 2. Multicollinearity Test

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.707	2.051		.832	.407		
	X1	-.092	.068	-.128	-1.349	.181	.997	1.003
	X2	.097	.072	.129	1.357	.178	.987	1.013
	X3	.116	.079	.139	1.463	.147	.988	1.012
	X4	.169	.086	.188	1.979	.051	.992	1.009
	X5	.175	.070	.238	2.502	.014	.991	1.009
a. Dependent Variable: Y								

Based on Table 2 of the test results carried out, it was found that the tolerance values for the variables X1, X2, X3, X4, X5 were above 0.10, while the VIF values for the variables X1, X2, X3, X4, X5 were below 10. Thus, it can be concluded that the data on the variables do not show multicollinearity, in accordance with the decision taken in the previous multicollinearity test.

Heteroscedasticity Test

The heteroscedasticity test is used to assess the existence or absence of deviations from the classical assumptions of heteroscedasticity in the regression model. This shows that all observations have residual variants. The working principle of the heteroscedasticity test in this study uses the Glacier test, where independent variables are regressed to absolute residual or Abs RES. Below is table 3 of the results of the heteroscedasticity test:

Table 3. Heteroscedasticity Test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.707	2.051		.832	.407
	X1_Total	-.092	.068	-.128	-1.349	.181
	X2_Total	.097	.072	.129	1.357	.178
	X3_Total	.116	.079	.139	1.463	.147
	X4_Total	.169	.086	.188	1.979	.051
	X5_Total	.175	.070	.238	2.502	.014
a. Dependent Variable: Y						

Based on table 3 above, the value of the sig X1, X2, X3, X4, X5 is greater than 0.05, so as the basis for making decisions on the Heteroscedasticity Test using the glacier method, it can be concluded that the data on the variable does not occur heteroscedasticity.

Test F

Table 4 shows the results of the F test conducted to test the hypothesis in the research on TIX ID application users. If the value of Fcal is greater than the value of Ftable, it can be concluded that the independent variable simultaneously affects the dependent variable. The following is a table of F test results:

Table 4. Test F

ANOVA[a]						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.943	5	18.789	20.885	.000[b]
	Residual	84.564	94	.900		
	Total	178.507	99			

a. Dependent Variable: Y1

b. Predictors: (Constant), X5_Total, X1_Total, X3_Total, X4_Total, X2_Total

Based on the information in table 4, the f calculation is worth 20.885 and the f table is worth 2.31. This shows that Fcal is greater than Ftabel (20.885 > 2.31). The table is obtained by dividing the number of independent variables by the number of samples then subtracting 1 (n-k-1). According to this study, user satisfaction is simultaneously influenced by content, accuracy, format, ease of use, and timeliness.

Test T

The t-test is carried out by comparing the t-value of each variable with the t-value of the table determined based on the formula (n-k-1). Where n is the number of samples and k is the number of free variables. The t-value of the table used in this study is 1.985. If the calculated t-value is greater than the t-value of the table, it can be concluded that the independent variable has a significant influence on the dependent variable. The results of the calculation table are:

Table 5. Test T

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.707	.841		2.030	.045
	X1_Total	-.092	.028	-.234	-3.290	.001
	X2_Total	.097	.029	.236	3.309	.001
	X3_Total	.116	.033	.255	3.569	.001
	X4_Total	.169	.035	.344	4.827	.000
	X5_Total	.175	.029	.435	6.101	.000

a. Dependent Variable: Y1

1. From table 5, it can be seen that the calculated t value for the content variable (X1) is -3.290 with t table 1.985. This means that the value of t calculated on the content variable is not greater than the t of the table. From these results, it can be concluded that the content variable does not have a significant effect on the user satisfaction variable (Y).
2. From table 5, it can be seen that the calculated t value for the accuracy variable (X2) is 3.309 with t table 1.985. This means that the value of t calculated on the accuracy variable is greater than the t table. From these results, it can be concluded that the accuracy variable has a significant effect on the user satisfaction variable (Y).
3. From table 5, it can be seen that the calculated t value for the format variable (X3) is 3.569 with t table 1.985. It means that the value of t calculated on the format variable is greater than the t of the table. From these results, it can be concluded that the format variable has a significant effect on the user satisfaction variable (Y).
4. From table 5, it can be seen that the calculated t value for the ease of use (X4) variable is 4.827 with t table 1.985. This means that the value of t calculated on the ease of use variable is greater than the t table. From these results, it can be concluded that the ease of use variable has a significant effect on the user satisfaction variable (Y).

5. From table 5, it can be seen that the calculated t value for the timeliness variable (X5) is 6.101 with t table 1.985. This means that the calculated t value on the timeline variable is greater than the t table. From these results, it can be concluded that the timeliness variable has a significant effect on the user satisfaction variable (Y).

Coefficient of Determination Test
Table 6 shows the results of the determination coefficient (R-squared) test for the regression model used in this study, the determination coefficient shows how much the independent variable (X) contributes in a regression model explains the variation of the dependent variable (Y). The following is a table of the results of the determination coefficient test:

Table 6. Coefficient of Determination Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.821[a]	.675	.657	.694

a. Predictors: (Constant), X5, X1, X3, X4, X2

This shows that the variables Content (X1), Accuracy (X2), Format (X3), Ease of Use (X4), and Timeliness (X5) can account for as much as 65.7% of the variation in User Satisfaction. The rest, amounting to 35.3%, was explained by other variables that were not studied in this study.

5. Discussion

This study uses the End User Computing Satisfaction (EUCS) method to evaluate the satisfaction of TIX ID application users in Depok City. Based on the data analyzed, the dimensions in EUCS provide insight into the user experience and the factors that affect their satisfaction.

Content Dimensions
The content of the TIX ID application, such as movie information, screening schedules, and cinema location details, was considered relevant by most respondents. These results show that the TIX ID application has successfully met user expectations in providing accurate and up-to-date information. However, there are some related inputs such as the completeness of the information, some users complain about the lack of additional details, such as other user reviews or movie recommendations. The suitability of content with local preferences needs to be adjusted to the culture and needs of users in Depok City can be an opportunity to increase satisfaction.

Accuracy Dimension
The TIX ID application is considered to have a high level of accuracy in displaying information. Most users feel that the data provided, such as ticket availability, prices, and cinema locations, corresponds to reality. However, there were complaints from a small number of respondents related to the discrepancy between the ticket availability information listed in the application and the actual conditions, especially when there was a big promotion.

Format Dimensions
The format and design of the app's interface get a positive response from users. Simple, intuitive, and user-friendly design is one of the main factors that support a good user experience. There is a need to optimize the interface on various devices, especially for small screens. Some respondents suggested adding more attractive visual elements to increase the app's appeal.

Ease of Use Dimensions
Ease of use is one of the dimensions with the highest score in this study. The features in the TIX ID app, such as the navigation of the interface and the ticket purchase process, are considered simple and easy to understand. However, there are some areas that need to be improved, namely accessibility for

new users by adding a usage guide or a short tutorial can help new users understand the app's functions faster.

Response Time Dimension
The app's response time, such as the speed at which it processes ticket searches and payments, is generally rated well by users. However, at certain times such as during major promotions or popular movie launches, the app's response time tends to decrease, causing complaints from users.

Key findings
The TIX-ID app has the power of accurate and relevant information, User-friendly interface, Ease in the ticket purchase process. Based on the findings, there are several things that need to be improved, namely more in-depth additional information, application performance during periods with high traffic, and the addition of payment methods to meet the preferences of local users.

Research Implications
The results of this study provide an in-depth understanding of how the TIX ID application meets the needs of users in Depok City. By addressing the identified shortcomings, TIX ID can increase user loyalty and expand market share. The study also demonstrates the relevance of the EUCS method for evaluating entertainment-based applications, providing a measurable framework for identifying the strengths and weaknesses of the application.

6. Conclusion

From 5 factors, it can be concluded that the results of the F test on the TIX ID aliquy with the variables content (X1), accuracy (X2), format (X3), ease of use (X4), and timeliness (X5) as a whole have a significant impact on user satisfaction (Y). However, the T test on the content variable (X1) did not have a significant influence on user satisfaction (Y) and the accuracy (X2), format (X3), ease of use (X4), and timeliness (X5) variables had a significant influence on user satisfaction (Y). Content, Accuracy, Format, Ease of Use, and Timeliness factors in the findings of this study in influencing user satisfaction by 65.7%.

References

Agustin, A., & Zayyan, F. K. (2024). Membangun Pelatihan Sdm Siap Kerja: Tantangan Dan Solusi Dalam Sistem Pendaftaran Online Di Balai Latihan Kerja Jember. *Jurnal Pelita Pengabdian*, *2*(1), 133–137.

Alfian, A., Gumas, A. R., & Gabriella, N. S. (2024). Tinjauan Yuridis Dampak Kemitraan Transportasi Online Di Bandar Lampung. *Mandub: Jurnal Politik, Sosial, Hukum Dan Humaniora*, *2*(1), 126–144.

Amalia, L., & Azizah, A. H. (2022). Evaluasi Kesuksesan Penerapan Sistem Elektronik Kinerja (E-Kinerja) Menggunakan Enhanced Information System Success Model di Kecamatan Benda Tangerang. *JISKA (Jurnal Informatika Sunan Kalijaga)*, *7*(3), 192–210.

Andini, P. W. (2024). Pengalaman Pengguna dalam Rancangan Aplikasi Pemesanan Tiket Kereta Api Mytrain Menggunakan Metode UX Journey. *Jurnal Repositor*, *6*(3).

Anggraini, M. (2022). *Analisis kepuasan pengguna terhadap penerapan OPAC menggunakan technology acceptance model dan end user computing satisfaction (studi kasus: Perpustakaan Soeman HS)*. Fakultas Sains dan Teknologi Universitas Islam Negeri Syarif Hidayatullah ….

Darwati, L. (2022). Analisis Tingkat Kepuasan Pengguna Aplikasi WETV Menggunakan Metode End User Computing Satisfaction (EUCS). *Jurnal Ilmiah Komputasi*, *21*(4), 34–42. https://doi.org/10.32409/jikstik.21.4.3217

Felix, A., Kembau, A. S., Stevania, S., & Wardhani, N. K. (2024). Analisis Faktor-Faktor Yang Mempengaruhi Customer Experience Dalam Pembelian Tiket Konser Pada Tiket. Com. *Economics and Digital Business Review*, *5*(2), 653–661.

Fitrianovita, F. (2023). Pengaruh Kualitas Sistem Informasi Akuntansi dan Kepercayaan terhadap Kepuasan Pengguna Aplikasi Livin by Mandiri. *Co-Value Jurnal Ekonomi Koperasi Dan Kewirausahaan*, *14*(6).

Golo, Z. A., Subinarto, S., & Garmelia, E. (2021). Analisis Tingkat Kepuasan Pengguna Sistem Informasi Puskesmas Menggunakan Metode End User Computing Satisfaction (EUCS) di Puskesmas. *Jurnal Rekam Medis Dan Informasi Kesehatan*, *4*(1), 52–56.

Handrianto, Y., & Pratama, L. F. (2024). Analisis Tingkat Kepuasan Pengguna Terhadap Aplikasi Jaksehat Menggunakan Metode End User Computing Satisfaction. *Jurnal Infortech*, *6*(1), 1–8. https://doi.org/10.31294/infortech.v6i1.21622

Hidayatullah, S., Khouroh, U., Windhyastiti, I., Patalo, R. G., & Waris, A. (2020). Implementasi Model Kesuksesan Sistem Informasi DeLone And McLean Terhadap Sistem Pembelajaran Berbasis Aplikasi Zoom Di Saat Pandemi Covid-19. *Jurnal Teknologi Dan Manajemen Informatika*, *6*(1), 44–52.

Novita, D., & Helena, F. (2021). Analisis Kepuasan Pengguna Aplikasi Traveloka Menggunakan Metode Technology Acceptance Model (TAM) Dan End-User Computing Satisfaction (EUCS). *Jurnal Teknologi Sistem Informasi*, *2*(1), 22–37.

Ramadhani, D., Sadikin, A., & Yorita Astri, L. (2023). Analisis Kepuasan Pengguna Website Sintap Unama Dengan Menggunakan Metode End User Computing Satisfaction (EUCS). *Jurnal Manajemen Teknologi Dan Sistem Informasi (JMS)*, *3*(2), 522–531. https://doi.org/10.33998/jms.2023.3.2.1409

Saputra, A., & Kurniadi, D. (2019). Analisis Kepuasan Pengguna Sistem Informasi E-Campus Di Iain Bukittinggi Menggunakan Metode Eucs. *Voteteknika (Vocational Teknik Elektronika Dan Informatika)*, *7*(3), 58. https://doi.org/10.24036/voteteknika.v7i3.105157

Saputri, N. A. O., & Alvin, A. (2020). Measurement of User Satisfaction Level in the Bina Darma Information Systems Study Program Portal Using End User Computing Satisfaction Method. *Journal of Information Systems and Informatics*, *2*(1), 154–162. https://doi.org/10.33557/journalisi.v2i1.43

Yang, M. Z., & Sihotang, J. I. (2022). Analisis Kepuasan Pengguna Terhadap User Interface Aplikasi E-Commerce Shopee Menggunakan Metode EUCS di Jakarta Barat. *Informatics and Digital Expert (INDEX)*, *4*(2), 53–60.

Yazid, M. A., Wijoyo, S. H., & Rokhmawati, R. I. (2019). Evaluasi Kualitas Aplikasi Ruangguru Terhadap Kepuasan Pengguna Menggunakan Metode EUCS (End-User Computing Satisfaction) dan IPA (Importance Performance Analysis). *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, *3*(9), 8496–8505.