

Factors Influencing Continuance Intention of Complaint Service: A Case Study of QLUE

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Abstract— The quality of information systems is the key to user satisfaction with an information system application. This study uses the information system success model as a theoretical basis for discussing the influence of information system quality on the sustainability of using Information System applications. Qlue is used as a case study as one of the complaint service applications. This study uses a questionnaire with 299 data collected using Google Forms which are distributed through various social media. Then to test the hypothesis, the data is processed by Partial Least Square (PLS) using SmartPLS application. The results of this study explain that the factors influencing the intention to continue using Qlue are satisfaction with system quality and information quality, including design aesthetic, immediacy, and customization.

Keywords— Qlue, e-Participation, Continuance Intention, System Quality, Information Quality, User Satisfaction

I. INTRODUCTION

E-Participation is defined as the use of means of information and communication technology (ICT) to support democratic decision making [1] [2]. The United Nations (UN) e-Government Survey 2020 has placed Indonesia at 53rd in the e-Participation Index in 2020. By looking at the low ranking of Indonesia's e-participation index, it proves that building community participation is not an easy thing. The complexity of problems in urban areas requires innovative solutions. Therefore, improving the quality of life of urban communities is one of the main goals. Thus, the issue of intention to participate has attracted the attention of researchers in various countries.

Qlue is a Smart City application in Indonesia which is a form of e-participation. Based on Jakarta Smart City data, the number of public complaints using Qlue in November 2016 was 36,058; in December 2016, there were 28,901 reports. Then in 2017, there was a decrease in the number of reports; namely, in November 2017, there were 12,405, and in December 2017, there were 10,750 [3] [4] [5].

Several studies can be used as references, [6]; Understanding the Impacts of Information Quality, System

Quality, and Service Quality on Customers' Satisfaction and Continuance Intention [7]; and Smart Governance as Smart City Innovative Critical Success Factor (Case in 15 Cities in Indonesia) [8]. Wandering Detection Methods in Smart Cities: Current and New Approaches provides a brief overview of the current state of wandering detection. Researchers have demonstrated the main problems of placing people outdoors and the benefits that can be supplied in solving these problems. The study entitled Understanding the Impacts of Information Quality, System Quality and Service Quality on Customers' Satisfaction and Continuance Intention this study uses integrated expectation-confirmation theory (ECT) and IS success models to examine how consumer expectations, perceptions and confirmations, and satisfaction with quality information, system quality and service quality that affect the desire to continue to use online shopping. The results of this study indicate that confirmation and satisfaction are strongly influenced by perceived quality but not expectations. Finally, [8] has proven that an essential factor in the success of smart city implementation is intelligent city governance.

Based on the state of art that has been explained, Table 1 below is a research gap found by the author.

TABLE I. RESEARCH GAP ANALYSIS

Research Gap	Author	Title
Wandering Detection Method in Smart City.	Edgar Batista, Fran Casino and Agusti Solanas	Wandering Detection Methods in Smart Cities: Current and New Approaches [6]
Confirmation and satisfaction are strongly influenced by perceived quality but not expectations.	Yu Wen Hung and Shih-Chieh Hsu	Understanding the Impacts of Information Quality, System Quality, and Service Quality on Consumers' Satisfaction and Continuance Intention [7]
Innovative governance activities are assessed from the implementation of the e-government system.	Firman Anindra, Suhono H. Supangkat, and Raymondus Raumont Kosala	Smart Governance as Smart City Critical Success Factor (Case in 15 Cities in Indonesia) [8]

This study aims to determine what factors influencing continuance intention of the complaint service from Qlue and provide consideration for improving service quality in terms of application development

II. LITERATURE REVIEW

A. IS Success Model

DeLone and McLean [9] modeled the factors that support the success of an information system and produced a model to measure the multidimensional and interdependent complex variables that support it. This model has six dimensions: System Quality, Information Quality, Use, User Satisfaction, Individual Impact, and Organizational Impact. System and information quality have been identified as essential in increasing system usage and user satisfaction. In addition, user use and happiness will have a personal impact, and the individual impact will ultimately affect the organizational implications

DeLone and McLean [10] revised several indicators, which can be seen in Fig. 1. Quality has three main dimensions: system quality, information, and service quality. All three affect the use and user satisfaction. The net benefits indicator was added, and the individual and organizational impact indicators were removed. The arrows show the relationship between the indicators but show no positive or negative signs for the association in a causal sense. This study uses three indicators from the DeLone and McLean updated IS success model: information quality, system quality, and user satisfaction [10].

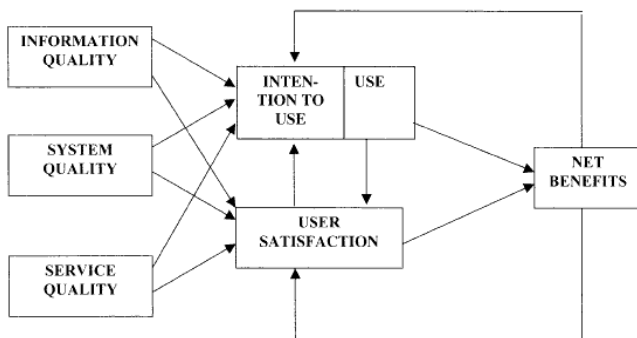


Fig. 1. Updated DeLone & McLean IS Success Model

B. IS Continuance

Several studies have investigated the variables that influence individuals to accept and use an information system, such as the innovation diffusion theory [11], the technology acceptance model [12], and the theory of planned behavior [13]. A person's first acceptance of an information system is essential, but the long-term survival and success of an information system depend on its continued use. This concept is an adoption of the expectation-confirmation model used in consumer satisfaction, post-purchase behavior, and marketing services in general [14] [15] [16] [17] [18] [19].

Post-acceptance model in the context of IS continuance refers to the Expectation-Confirmation Theory developed in consumer behavior [15]. Four main variables are the perception of use, confirmation, satisfaction and IS continuance intention.

The primary constructs and relationships between variables developed by [20] can be seen in Fig. 2. The post-acceptance model by [20] explains the intention of information system users to continue (eventually discontinue) using the information system. This model is built on the assumption that users, after the first-time acceptance and initial use period, form an opinion on the extent to which their pre-acceptance expectations are confirmed. Simultaneously, they construct views about the benefits of using SI (perceived usefulness). After a certain period, the level of confirmation and perceived usefulness is the basis for user satisfaction with information systems. Finally, perceived usefulness and happiness affect users' willingness to continue using the information system.

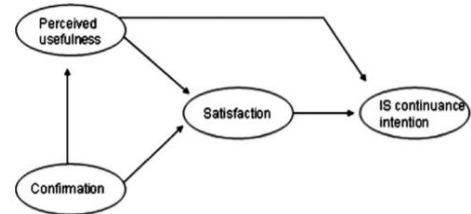


Fig. 2. Post-acceptance Model of IS Continuance

C. Technology Acceptance Model

There is an information systems theory that explains user behavioral intentions. This theory is called the technology acceptance model (TAM), which has the potential to use technological innovations that adapt the Theory of Reasoned Action (TRA), a psychological theory of behavior, in the field of information systems [21]. TAM involves two leading indicators, namely perceived ease of use (UE) and perceived usefulness (U), and the dependent variable is behavioral intention (BI). This model states that perceived effectiveness and ease of use affect the choice to receive and use an information system. The easy-to-understand and straightforward TAM model has been widely implemented in the field of information systems. This theory has also been tested empirically in different cellular settings [22] [23]

D. Information Adoption Model

An information adoption model (IAM) developed by [22] explains how individuals adopt information and change their intentions and behavior in computer-mediated communication platforms. This model highlights the use of information as a mediator between information adoption and influencing processes. The source's credibility and the argument's quality are considered two distinct processes that affect the user's perception of the use of information. Information adoption models have recently been further examined in one community [24] [25]. However, there is a lack of research in understanding the adoption of contextually relevant information in different environments. Unlike information from websites, optimal information can be sent to users based on their spatial, temporal, and personal context through differotheres [26].

To examine the factors influencing the adoption of online opinions for online communities [27] use IAM. Four aspects are used as variables. These aspects include argument quality (completeness, relevance, timeliness, accuracy), source

credibility (skills and trustworthiness of sources), information adoption, and information usefulness. This study concludes that only a comprehensive argument's relevance and quality significantly affect the effectiveness of information, which in turn influences individual decisions to adopt information in online communities.

III. THEORETICAL FRAMEWORK

The research model used in this study was built based on the IS success model, Post-acceptance model from IS continuance, technology acceptance model, information adoption model, and various related literatures which are illustrated in Fig. 3.

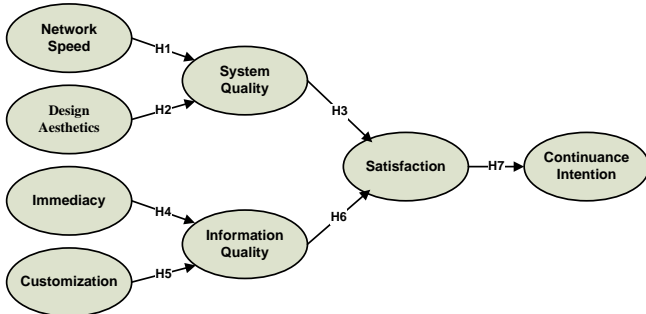


Fig. 3. Research Model

A. System Quality and Customer Satisfaction

Qlue is a social media application for reporting mobile-based problems. The existing mobile system involves various vendors, such as wireless network service providers, mobile device manufacturers, and content service providers. Network speed reflects the quality of a wireless network, while design aesthetics is used to assess the quality of mobile applications. The quality of a system is related to the perceived stability and efficiency system [9]. Network speed is equally important in determining mobile Internet user satisfaction, so the quality of a mobile Internet service system can significantly influence adoption and continued use [28]. Therefore, the authors propose the following hypothesis:

H1: The network speed of the Qlue application has a positive impact on the user's perception of the quality of the Qlue application system.

The mobile application quality is essential in determining the system's overall quality. Interface design is an important issue addressed by information systems researchers [29] [30]. Interface design more specifically refers to the beauty of the design of a mobile application. The beauty of the design significantly affects the perception of usability, ease of use, and enjoyment, all of which ultimately affect the user's honorable intentions toward cellular services [31]. This research includes aspects of the Qlue application design's beauty in assessing the system's quality. A well-designed application design will improve the usability and overall performance of the system. Therefore, the authors propose the following hypothesis:

H2: The beauty of the Qlue application design positively impacts the user's perception of the quality of the Qlue application system.

Three indicators influence the successful implementation of information systems, namely system quality, information quality, and service quality, where the three indicators relate to user satisfaction [10]. User satisfaction is the primary goal of developing an information system that can meet users' needs. Satisfaction is a person's liking or disliking of a product after comparing the quality of the product with his expectations [32]. Perception of system quality is one of the predictors that significantly affect user satisfaction [33]. Therefore, the authors propose the following hypothesis:

H3: The quality of the Qlue application system positively impacts user satisfaction with the Qlue application.

B. Information Quality and Customer Satisfaction

Information quality is measured in terms of accuracy, timeliness, completeness, relevance, and consistency [10]. The information quality of mobile applications such as Qlue has several dimensions, namely immediacy and customization. Closeness describes the user's perception of the degree to which information is updated in real-time and is time-sensitive. Customization is the user's perception of how well the information is tailored based on their real identity and profile. Direct knowledge is closely related to the "anytime" feature of mobile commerce and ensures the provision of real-time information [34] [35]. In addition, custom information, i.e., specifically designed for individuals, will allow users to get the information they want quickly. Thus, the proposed hypothesis is the immediacy and customization of information in the Qlue application will have a positive impact on the overall quality of information:

H4: The immediacy of the Qlue application information has a positive impact on user perceptions of the quality of the Qlue application information.

H5: Customization of Qlue application information positively impacts users' perceptions of the quality of Qlue application information.

Based on the [10] IS success model, the quality of information is one of the main factors that affect user satisfaction. The quality of the information in cyberspace is defined as the user's perception of the quality of the information presented on the website [36]. Good quality information will help users find and compare products and services online to make better decisions. Therefore, quality information increases user satisfaction and can make websites more helpful in completing their tasks [37]. Therefore, the authors propose the following hypothesis:

H6: The quality of the Qlue application information has a positive impact on user satisfaction with the Qlue application.

C. Customer Satisfaction and Continuance Intention

Continuance Intention is defined as the user's plan to continue using the system that has been adopted [20]. Based on the Post-acceptance model, perceived satisfaction affects the user's willingness to continue to use the information system. High satisfaction can make users repeat their consumption in the future [38] [28]. Therefore, the authors propose the following hypothesis:

H7: Customer satisfaction with *Qlue* positively impacts user intentions to continue using the *Qlue* application.

IV. METHODOLOGY

A. Research Instrument

This study used a research instrument in the form of a questionnaire made with an online form. The questionnaire was distributed to the users of the *Qlue* application. The questionnaire was prepared based on a research model built on the IS success model, technology acceptance, information adoption, and human-computer interaction literature. The type of question used is a closed question. The questionnaire will consist of statements measured by numbers 1 to 5 to represent the respondent's condition. The reason the author uses a questionnaire is to be able to obtain a large amount of data in a fast time. The hypothesis is tested through survey data obtained based on the indicators that have been determined in the questionnaire presented in Table 2.

TABLE II. RESEARCH INSTRUMENT

Variable	Indicator	Item
Network Speed	NET1	I think the <i>Qlue</i> network is fast
	NET2	<i>Qlue</i> network speed makes me feel comfortable.
Design Aesthetics	DSG1	The <i>Qlue</i> design display (colors, menus, icons, boxes, etc.) is attractive.
	DSG2	The <i>Qlue</i> interface looks professionally designed.
	DSG3	Overall, <i>Qlue</i> 's appearance is visually appealing.
Immediacy	IMM1	<i>Qlue</i> provides real-time information and services.
	IMM2	<i>Qlue</i> delivered the information package to me quickly.
	IMM3	I received that information from <i>Qlue</i> very quickly.
Customization	CUS1	When using <i>Qlue</i> , my personal needs have been met.
	CUS2	<i>Qlue</i> provides information for me based on my preferences.
	CUS3	The information <i>Qlue</i> sent me was tailored to my situation.
System Quality	SYS1	Regarding the system's quality, I will give high marks for the entire system in terms of network, privacy, and design.
	SYS2	The whole system is high quality, related to network, privacy, and design.
Information Quality	INF1	<i>Qlue</i> provides high-quality information
	INF2	I would give high marks to the information <i>Qlue</i> provides
Satisfaction	SAT1	I am generally satisfied with the <i>Qlue</i> system
	SAT2	I am generally satisfied with the information provided by <i>Qlue</i> .
Continuance Intention	CON1	I will continue to use the <i>Qlue</i> app
	CON2	I intend to continue using the <i>Qlue</i> app instead of other complaining apps.

B. Data Collection Procedure

This study uses primary data that has been collected based on the results of the questionnaire. Questionnaires were distributed to various social media and collected using Google Forms. The questionnaire contains questions that have been

compiled in the previous section. In a period of 5 days, the researchers got 299 data with 278 valid and 21 invalid.

C. Analysis Data Methods

In this study, quantitative assessment is used. Data is processed by Partial Least Square (PLS) using SmartPLS application. PLS is a method that can measure the relationship of many variables to a particular variable using the regression method. The hypothesis was tested through the survey data obtained.

V. RESULT

The demographic data of respondents from this study are summarized in Table 3, the number of respondents is 299, and the valid ones are 278. The profiles received from the respondents are domicile, gender, and age. The gender of the total male respondents was 51% male and 49% female. The respondents' domicile was separated into three major categories: Jabodetabek 60%, Java Island and outside of Jabodetabek, 18%, and outside Java Island, as much as 22%. The age category in the range of 17-25 years is 73%. There are 1% for age less than 17 years, 24% for 26 to 45 years, and 2% for over 45 years.

TABLE III. DEMOGRAPHIC DATA OF RESPONDENTS

No	Category	Sub Category	Total	Frequency
1	Domicile	Jabodetabek	167	60%
		Java Island and outside of Jabodetabek	50	18%
		Outside of Java Island	61	22%
2	Gender	Male	142	51%
		Female	136	49%
3	Age	<17	3	1%
		17-25	202	73%
		26 - 45	67	24%
		> 45	6	2%

According to [39], PLS data processing includes two major stages, evaluation of measurement models and evaluation of structural models.

A. Measurement model test

This study uses a nonparametric approach with bootstrapping as an option to continue the analysis with abnormal data distribution conditions.

The measurement model testing phase is a confirmatory factor analysis that tests the measurement model's validity and reliability. The loading factor, AVE, CR, and CA values for the measurement model of this study are presented in Table 4. It is known that there is no loading factor value < 0.6, and all variables have an AVE value > 0.5. In addition, all variables have CR and CA values > 0.7. To test discriminant validity, evaluate the cross-loading value between the construct and the indicators that build it and compare it with other existing indicators. From the results of the cross-loading evaluation, it is known that there is no measurement item whose value is lower than the other measurement items for the construct that was built. Thus, it can be concluded that the measurement model used has met the validity and reliability tests.

TABLE IV. LOADING FACTOR VALUE, CRONBACH ALPHA (CA), AVERAGE VARIANCE EXTRACTED (AVE) & COMPOSITE RELIABILITY (CR)

Indicator	Loading Factor (> 0,6)	Cronbach Alpha (>0,7)	Composite Reliability (0,7)	Average Variance Extracted (>0,5)
NET1	0.865	0.808	0.907	0.830
NET2	0.955			
DSG1	0.905	0.841	0.904	0.759
DSG2	0.848			
DSG3	0.859			
IMM1	0.759	0.801	0.882	0.715
IMM2	0.898			
IMM3	0.873			
CUS1	0.855	0.866	0.918	0.789
CUS2	0.898			
CUS3	0.911			
SYS1	0.966	0.933	0.968	0.937
SYS2	0.970			
INF1	0.900	0.793	0.906	0.828
INF2	0.921			
SAT1	0.776	-	-	-
SAT2	0.951	-	-	-
CON1	0.930	0.828	0.921	0.853
CON2	0.917			

B. Structural Model Test

Hypothesis testing is done by comparing the p-value with a significance level of 5% (one-tailed) in the process that has been done previously by looking at the value of regression weights. Based on the results of the structural model test presented in Table 5, it is known that from the 7 hypotheses proposed, 6 hypotheses are accepted and 1 hypothesis is rejected.

TABLE V. PATH COEFFICIENT AND HYPOTHESIS TESTING RESULTS

Hypothesis	P-Values	Decision
H1 (NET → SYS)	0.064	Rejected
H2 (DSG → SYS)	0.000	Approved
H3 (SYS → SAT)	0.000	Approved
H4 (IMM → INF)	0.021	Approved
H5 (CUS → INF)	0.000	Approved
H6 (INF → SAT)	0.000	Approved
H7 (SAT → CON)	0.000	Approved

The coefficient of determination is defined as how big the ability of all independent variables in explaining the variance of the dependent variable. Based on the value of the coefficient of determination presented in Table 6, it can be determined the strength of the structural model built. From the four structural models, it is known that there are three structural models which are strong models.

TABLE VI. DETERMINATION COEFFICIENT (R²)

Variable	Estimate	Description
CON	0.544	Strong
SAT	0.757	Strong
INF	0.660	Strong
SYS	0.428	Middle

VI. DISCUSSION

By adopting DeLone and McLean's IS Success research model, this research has identified the models and factors that influence users' intentions to continue using the Qlue application, especially as a social media to report city problems to the government, private parties, or share information with fellow citizens in the neighborhood. Around users for the creation of a Smart City. The results of the analysis described previously prove that continuance intention for the Qlue application is influenced by several factors such as system quality, information quality, and user satisfaction. These results follow the IS success model of [10], which explains the system's quality and information quality that affect user satisfaction. In addition, user satisfaction positively affects continuance intention, following Bhattacharjee's post-acceptance model [20].

In contrast to the research results conducted by [28] this study has not proved that network speed has an essential effect on the quality of the Qlue application service system, which can affect user satisfaction. However, the design aesthetics of the Qlue application have been shown to positively influence the system's quality. These results follow the research on design beauty which significantly affects perceptions of usability, ease of use, and enjoyment, all of which ultimately affect user loyalty toward cellular services [31]. The aesthetic design in this study is the user interface design in the Qlue application. A well-designed Qlue application interface design will improve the usability and overall performance of the system.

The results of this study prove that real-time and fast information will improve the quality of the information in the Qlue application. In addition, information customization tailored to each user in the Qlue application has also been shown to positively affect the quality of the Qlue application information. These results align with the theory [10], which explains that data quality is measured in terms of accuracy, timeliness, completeness, relevance, and consistency.

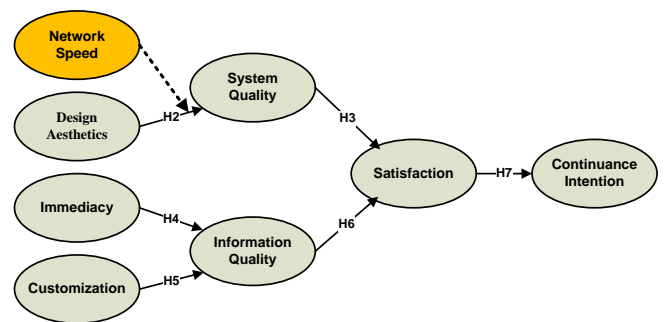


Fig. 4. Research result model

There is one rejected hypothesis, namely hypothesis number H1: The network speed of the Qlue application has a positive impact on user perceptions of the quality of the Qlue application system. From the calculation of the research model, it can be seen in Fig. 4.

From a theoretical point of view, this research contributes to the concept of the IS success model so that further research will be more helpful in selecting factors that affect system

quality and information quality from an information system. Then from a practical point of view, the implications of the results of this study are for Qlue to pay more attention to the aesthetic aspects of design, the immediacy of information, and customization because it has been proven that these three aspects affect the use of Qlue services on an ongoing basis. For the aesthetic aspect of the design, it is necessary to improve its beauty to make it easier for users to use and be more comfortable and enjoy the application design. For the immediate aspect of information (immediacy), improvements are needed in processing information more quickly so that the resulting data is accurate and real-time. Finally, for the customization aspect, technology assistance such as machine learning is needed to improve information processing that aligns with the user's original identity and profile.

VII. CONCLUSION

The research succeeded in building a model and identifying the factors driving the use of the Qlue complaint service in a sustainable manner using ECT. The analysis results prove that the community's continuity of using Qlue is influenced by aesthetic design factors, immediacy, and customization. Design aesthetic factors have a positive effect on determining the quality of the system. Likewise, immediacy and customization factors positively impact assessing the quality of information. The quality of the system and the quality of information directly affect the satisfaction of the user experience, which directly affects the use of the Qlue complaint service on an ongoing basis.

REFERENCES

- [1] A. Macintosh, "Characterizing E-Participation in Policy-Making," in *Proceedings of the 37th Hawaii International Conference on System Sciences*, 2004.
- [2] R. Medaglia, "eParticipation research: Moving characterization forward (2006–2011)," *Government Information Quarterly*, vol. 29, no. 3, pp. 346-360, 2012.
- [3] K. S. Azizah, "Laporan Qlue Turun Setelah Pergantian Gubernur DKI, Ini Penyebabnya," 2019. [Online]. Available: <https://megapolitan.kompas.com/read/2019/03/28/17381101/laporan-qlue-turun-setelah-pergantian-gubernur-dki-ini-penyebabnya>.
- [4] F. Salam and R. Hidayat, "Aplikasi Qlue Tak Lagi Diutamakan oleh Anies," 2018. [Online]. Available: <https://tirto.id/aplikasi-qlue-tak-lagi-diutamakan-oleh-anies-cED2>. [Accessed 28 March 2019].
- [5] "Qlue - About Us," Qlue, [Online]. Available: <https://www.qlue.co.id/about-us/>. [Accessed 28 March 2019].
- [6] E. Batista, F. Casino and A. Solanas, "Wandering detection methods in smart cities: Current and new approaches," in *2015 IEEE First International Smart Cities Conference (ISC2)*, 2015.
- [7] Y. Y. Wung and S. Hsu, "Understanding the Impacts of Information Quality, System Quality and Service Quality on Consumers' Satisfaction and Continuance Intention," in *2013 Fifth International Conference on Service Science and Innovation*, 2013.
- [8] F. Anindra, S. H. Supangkat and R. R. Kosala, "Smart Governance as Smart City Critical Success Factor (Case in 15 Cities in Indonesia)," in *2018 International Conference on ICT for Smart Society (ICISS)*, 2018.
- [9] W. H. DeLone and E. R. McLean, "Information Systems Success: The," *Information Systems Research*, vol. 3, no. 1, 1992.
- [10] W. H. DeLone and E. R. McLean, "Measuring e-Commerce Success: Applying the DeLone & McLean Information Systems Success Model," *International Journal of Electronic Commerce*, vol. 9, no. 1, pp. 31-47, 2004.
- [11] E. M. Rogers, *Diffusion of innovations* (5th ed.), New York: NY: Free Press, 2003.
- [12] F. D. Davis, R. P. Bagozzi and P. R. Warshaw, "User acceptance of computer technology: A comparison of two theoretical models," *Management Science*, vol. 55, no. 8, pp. 982-1003, 1989.
- [13] I. Ajzen, "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179-211, 1991.
- [14] E. W. Anderson and M. W. Sullivan, "The antecedents and consequences of customer satisfaction for firms," *Mark Sci*, vol. 12, no. 2, pp. 125-143, 1993.
- [15] R. L. Oliver, "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions," *Journal of Marketing Research*, vol. 17, no. 4, pp. 460-469, Nov 1980.
- [16] K. Akdim, L. V. Casaló and C. Flavián, "The role of utilitarian and hedonic aspects in the continuance intention to use social mobile apps," *Journal of Retailing and Consumer Services*, vol. 66, May 2022.
- [17] P. A. Dabholkar, C. D. Shepherd and D. I. Thorpe, "A comprehensive framework for service quality: an investigation of critical conceptual and measurement issues through a longitudinal study," *Journal of Retailing*, vol. 76, no. 2, pp. 139-173, 2000.
- [18] P. G. Patterson and R. A. Spreng, "Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: an empirical examination," *International Journal of Service Industry Management*, vol. 8, no. 5, pp. 414-434, 1997.
- [19] D. K. Tse and P. C. Wilton, "Models of Consumer Satisfaction Formation: An Extension," *Journal of Marketing Research*, 1988.
- [20] A. Bhattacharjee, "Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*," pp. 351-370, 2001.
- [21] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of," *MIS Quarterly*, vol. 13, no. 3, pp. 319-340, 1989.
- [22] M. C. Lee, "Factors Influencing the Adoption of Internet Banking: An Integration of TAM and TPB with Perceived Risk and Perceived Benefit," *Electronic Commerce Research and Applications*, vol. 8, no. 3, p. 130–141, 2009.
- [23] C. C. Chen and J. L. Tsai, "Determinants of Behavioral Intention to Use the Personalized Location-based Mobile Tourism Application: An Empirical Study by Integrating TAM with ISSM," *Future Generation Computer Systems*, vol. 96, pp. 628-638, 2019.
- [24] C. M. Cheung, M. K. Lee and N. Rabjohn, "The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities," *Internet Research*, vol. 18, no. 3, pp. 229-247, 2008.
- [25] X. Sheng, N. Wang, Y. Sun and L. Xiang, "Unleash the power of mobile word-of-mouth," *Online Information Review*, vol. 37, no. 1, pp. 42-60, 2013.
- [26] I. Lee, J. Kim and J. Kim, "Use Contexts for the Mobile Internet: A Longitudinal Study Monitoring Actual Use of Mobile Internet Services," *International Journal of Human-Computer Interaction*, vol. 18, no. 3, pp. 269-292, 2009.
- [27] C. M. Cheung, M. K. Lee and N. Rabjohn, "The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities," *Internet Research*, vol. 18, no. 3, pp. 229-247.
- [28] K. J. Kim, I. J. Jeong, C. J. Park, Y. J. Park, C. G. Kim and T. H. Kim, "The impact of network service performance on customer satisfaction and loyalty: High-speed internet service case in Korea," *Expert Systems with Applications*, vol. 32, no. 3, pp. 822-831, April 2007.
- [29] Y. E. Lee and I. Benbasat, "A Framework for the Study of Customer Interface Design for Mobile Commerce," *International Journal of Electronic Commerce*, vol. 8, no. 3, pp. 79-102, 2004.

- [30] V. Venkatesh and V. Ramesh, "Web and Wireless Site Usability: Understanding Differences and Modeling Use," *MIS Quarterly*, vol. 30, no. 1, pp. 181-206, 2006.
- [31] D. Cyr, M. Head and A. Ivanov, "Design aesthetics leading to m-loyalty in mobile commerce," *Information & Management*, vol. 43, no. 8, pp. 950-963, 2006.
- [32] P. Kotler and W. Pfoertsch, *B2B Brand Management*, Heidelberg: Springer, 2006.
- [33] J. Livari, *An Empirical Test of The DeLone and McLean Model of Information System Success Database for Advances in Information System*, Spring, 2005.
- [34] P. Tiwari, S. K. Tiwari and A. Gupta, "Examining the Impact of Customers' Awareness, Risk and Trust in M-Banking Adoption," *FIIB Business Review*, vol. 10, no. 4, pp. 413-423, 2021.
- [35] R. Tiwari, S. Buse and C. Herstatt, "Mobile Banking as Business Strategy: Impact of Mobile Technologies on Customer Behaviour and Its Implications for Banks," in *2006 Technology Management for the Global Future - PICMET 2006 Conference*, 2006.
- [36] V. McKinney, K. Yoon and F. M. Zahedi, "The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach," *Information Systems Research*, vol. 13, no. 3, pp. 296-315, Sept 2002.
- [37] M. Ghasemaghaei and K. Hassanein, "Online information quality and consumer satisfaction: The moderating roles of contextual factors – A meta-analysis," *Information & Management*, vol. 52, no. 8, pp. 965-981, 2015.
- [38] S. Balasubramanian, P. Konana and N. M. Menon, "Customer Satisfaction in Virtual Environments: A Study of Online Investing," *Management Science*, vol. 49, no. 7, pp. 871-889, 2003.
- [39] W. R. Fitriani, A. F. Wicaksono, D. G. Joewono, M. Z. Zaffar, R. A. Shahputra, Z. Ronnavelly, A. N. Hidayanto and L. Y. Stefanus, "The Antecedents of Trust and Their Influence on M-Health Adoption," in *2020 Fifth International Conference on Informatics and Computing (ICIC)*, Gorontalo, 2020.
- [40] S. W. Sussman and W. S. Siegal, "Informational Influence in Organizations: An Integrated Approach to Knowledge Adoption," *Information Systems Research*, vol. 14, no. 1, pp. 1-125, 2003.
- [41] Ø. Sørøbø and T. R. Eikebrokk, "Explaining IS continuance in environments where usage is mandatory," *Computers in Human Behavior*, vol. 24, no. 5, pp. 2357-2371, 2008.