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Analysis of User Satisfaction in the Test of English Proficiency Information System (SIMTEP) Service at UNESA Using the E-S-QUAL Method

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ABSTRACT

The Test of English Proficiency Information System (SIMTEP) at Universitas Negeri Surabaya is a technology-based service that plays an important role in supporting English proficiency testing; therefore, evaluating its service quality is essential to ensure user satisfaction. This study aims to analyze user satisfaction with SIMTEP services using the E-S-QUAL method through a quantitative approach. One hundred participants filled out surveys, and the results were evaluated using SEM—specifically, the Partial Least Squares (PLS) method. Total user happiness is classified as satisfied, according to the data, with an average satisfaction score of 3.99. Five of the seven hypotheses tested were shown to be true: system availability and remuneration did not significantly impact user happiness, but efficiency, fulfillment, privacy, responsiveness, and interaction did. Service efficiency, data privacy, ease of contact, responsiveness, and fulfillment accuracy are the primary factors that impact customer satisfaction with SIMTEP, according to these research. In addition to providing a foundation for future studies on electronic service quality and user satisfaction, this study is anticipated to provide an assessment reference for enhancing SIMTEP service quality.

Keyword: User Satisfaction, E-Service Quality, E-S-QUAL, Structural Equation Modeling, Information System.

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1. INTRODUCTION

Academic information systems at universities are one example of how the rise of the digital age has prompted a shift in how educational services are delivered via the use of information technology. A system can generally be defined as a set of interrelated elements that interact to achieve specific objectives and are influenced by both internal and external factors [1]. In the context of modern organizations, information systems consist of integrated components such as hardware, software, data, people, and processes that work together to generate value for the organization [2]. Information itself is defined as processed data that has meaning and can reduce uncertainty in decision-making [3]; [4]. Therefore, higher education institutions have begun to utilize application-based and online information systems to support

academic and administrative activities. Institutional readiness in designing and managing information technology–based services is an important factor in ensuring optimal utilization and generating a real impact on institutional productivity [5]. Previous studies have also shown that the use of information technology significantly affects university performance [6].

One of the digital services provided by Universitas Negeri Surabaya is the Test of English Proficiency (TEP) administered by the Language Center (UPT Pusat Bahasa). This service is accessed through the SIMTEP system, which is integrated with a Single Sign-On (SSO) account, enabling users to register, select test schedules, make payments, and manage test results and certificates more efficiently [7]. The implementation of an information system such as SIMTEP is expected to improve service efficiency and facilitate information distribution to users [4].

However, preliminary research involving 11 respondents consisting of UNESA students and general participants indicates that users still experience several difficulties when accessing the SIMTEP system. A total of 63.6% of respondents stated that information regarding technical issues was not clearly or promptly communicated, while 72.7% indicated that system information was not always updated in a timely manner. Additionally, 36.4% reported that the system interface and navigation were not entirely easy to understand, and that information and follow-up actions regarding system errors were not clearly communicated. These issues relate to system quality, information quality, and usability, which are crucial aspects of an information system that determine its success [8].

The level of happiness felt by end users is a good measure of how well an information system is working in service industries that rely on technology. One definition of customer satisfaction is the degree to which actual service performance meets or exceeds user expectations [9]. According to the Technology Acceptance Model (TAM), two more factors that impact technology acceptance are the perceived utility and the perceived ease of use [10]. Therefore, evaluating the quality of information system services is essential to ensure that the services provided meet user needs and expectations effectively [11] [12].

This study used the E-S-QUAL model, which was established by Parasuraman et al., to assess the quality of digital services [13]. This model is an extension of the SERVQUAL model, which was previously used to measure service quality by comparing user perceptions and expectations [14]. E-S-QUAL is a four-part tool for assessing the quality of electronic services in four key areas: privacy, system availability, efficiency, and fulfillment [13]. The model has been widely used in previous studies and has been proven to influence user satisfaction in digital services, including application-based services [15] and electronic banking services [16]. However, most previous studies focus on commercial sectors such as e-commerce, food delivery services, and electronic banking. Research specifically evaluating the service quality of language proficiency testing systems within higher education institutions remains limited. Moreover, studies assessing user satisfaction in web-based language testing systems such as SIMTEP are still relatively rare. Therefore, this research aims to analyze the level of user satisfaction with the SIMTEP service at UNESA based on the E-S-QUAL indicators in order to provide empirical insights into the perceived quality of digital services and to offer recommendations for system developers to improve service quality and user experience.

2. METHODS

To better understand the connection between high-quality electronic services and happy customers, this research builds a conceptual model using the E-S-QUAL theory as a foundation.

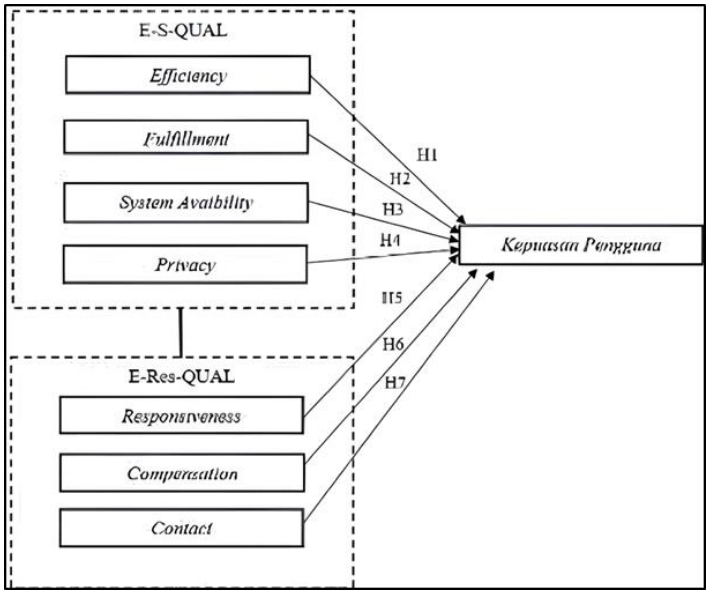

Figure 1. E-S-QUAL Conceptual Model [17]

The following assumptions are made using the model shown in Figure 1 as a basis:

H1: "Efficiency significantly affects User Satisfaction
H2: System Availability significantly affects User Satisfaction
H3: Fulfillment significantly affects User Satisfaction
H4: Privacy significantly affects User Satisfaction
H5: Responsiveness significantly affects User Satisfaction
H6: Compensation significantly affects User Satisfaction
H7: Contact significantly affects User Satisfaction"

The research stages in this study are described briefly as follows:

1. Problem Identification

The use of the Test of English Proficiency Information System (SIMTEP) at UNESA has facilitated access to language testing services for students and the general public. However, a preliminary survey of 11 respondents revealed several issues related to information clarity, service information updates, system navigation, and system error handling, with percentages of 63.6%, 72.7%, and 36.4%, respectively. In addition, a review of evaluation documents indicates that the satisfaction surveys conducted by the university are still general and do not specifically evaluate the SIMTEP service [18]. Therefore, further evaluation is needed to identify system service quality and improve user experience.

2. Literature Review

The literature review was conducted to examine theories, concepts, and previous research relevant to the study topic and to identify potential research gaps. Through systematic literature analysis, researchers can understand the strengths and limitations of

existing models in the context of information system services, enabling more accurate formulation of research hypotheses and indicators. Thus, the literature review provides a scientific basis for designing a relevant and measurable study.

3. Research Method

Utilizing numerical data, this study investigates the correlations between variables utilizing a quantitative method and a verification research design. To evaluate the quality of electronic services provided over the web, one uses the E-S-QUAL model [13]. To collect data, researcher use a **Likert scale**. Then, we use SmartPLS software and the Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach to analyze it.

4. Research Instrument

The research instrument consists of a structured questionnaire distributed through Google Forms, developed based on the indicators of the E-S-QUAL model proposed by Parasuraman et al [13]. Online distribution was used to facilitate respondent access and simplify data collection and analysis using SmartPLS. This approach has also been applied in previous studies.

On a five-point Likert scale (ranging from 1 to 5), the study instrument measures respondents' attitudes, perceptions, and satisfaction regarding the system through a set of twenty-one statement items. The level of user satisfaction was analyzed using the mean value of each indicator, which was then interpreted into satisfaction categories ranging from very dissatisfied to very satisfied, based on a scale adapted from the study by Yang and Sihotang [19]. This approach enables user satisfaction to be evaluated quantitatively and systematically.

5. Population and Sample

The population of this study consists of students at Universitas Negeri Surabaya who have used the SIMTEP system within the last year, totaling **9,663 users** based on data from the UNESA Language Center (2025). A minimum of 98.97 respondents were selected using **purposive sampling** and the Slovin algorithm with a 10% margin of error. To ensure more representativeness, the sample was rounded to 100 respondents [20]. Sample distribution across faculties was conducted using the proportional distribution method to reflect the composition of active students[21]. Student population data were obtained from the UNESA University Database [22].

6. Preliminary Data Collection

In order to ensure that the study instrument was feasible, preliminary data collection was carried out prior to the main data collection. This stage aims to ensure that the instrument is valid, reliable, and easily understood by respondents [23]. nitial data were collected from 30 respondents using purposive sampling.

7. Validity and Reliability

Validity and reliability tests were conducted to ensure that the research instrument was appropriate for use in the main data collection. Item validity was tested using the Pearson Product Moment correlation in SPSS, where items are considered valid if r-count > r-table or significance < 0.05 [24]. Instrument reliability was then tested using Cronbach's Alpha, where a value of ≥ 0.70 indicates good reliability. This stage ensures the internal consistency of the instrument.

8. Advanced Data Collection

Advanced data collection was carried out after the research instrument was declared valid and reliable through testing on the preliminary data. Universitas Negeri Surabaya students who had utilized SIMTEP in the last year were the ones who were purposively sampled and then sent the survey via the internet. One hundred people were polled for the study, with a 10% margin of error assumed using the Slovin formula, of which 70 respondents were used in the advanced data collection stage [23]. After collecting the data, it was descriptively evaluated and subsequently tested for the relationship between SIMTEP user happiness and electronic service quality using the PLS-SEM technique.

9. Data Analysis

With the help of SmartPLS software, the Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach was used to evaluate the data acquired from the questionnaire. Both the measurement (outer) and structural (inner) models were tested using this approach, which allowed us to examine the correlations between the research model's latent variables, which were evaluated using a five-point Likert scale. Finding out which E-S-QUAL aspects had the most impact on SIMTEP UNESA users' happiness was the goal of the investigation.

10. Hypothesis Testing

Hypothesis testing in this study used the E-S-QUAL model developed by A. Parasuraman et al [13]. To analyze the influence of electronic service quality on SIMTEP Unesa user satisfaction. Seven hypotheses were proposed, namely “the influence of Efficiency, System Availability, Fulfillment, Privacy, Responsiveness, Compensation, and Contact on User Satisfaction”, which were formulated based on previous studies by Mulyanto & Istoningtyas [17] and Putri et al [25]. The PLS-SEM approach, with the help of SmartPLS software, was used to test all hypotheses.

a. Measurement Model (Outer Model)

By investigating the connection between indicators and latent variables, the outer model assesses the research instrument's quality. The validity assessment encompasses convergent validity using Average Variance Extracted (AVE $\geq$0.50), discriminant validity by HTMT (<0.90), and indicator reliability through the outer loading value ($\geq$0.70), and internal consistency reliability using Composite Reliability (0.70–0.90). This testing ensures that all indicators are able to measure the research constructs validly and reliably.

b. Structural Model (Inner Model)

Research model variables' interrelationships can be investigated using the inner model. Path Coefficient tested using bootstrapping with the criteria of t-statistic $\geq$1.96 or p-value $\leq$0.05, Cross-validated Redundancy (Q^2) to assess the model's predictive capability, Effect Size (f^2) to determine the magnitude of each independent variable's contribution, and the Coefficient of Determination (R^2) to determine the model's ability to explain the dependent variable are all part of the evaluation process. This research will help identify the factors affecting SIMTEP Unesa users' satisfication with the electronic service.

11. Conclusion

This study aims to analyze the factors that influence user satisfaction with the Test of English Proficiency Information System (SIMTEP) at Universitas Negeri Surabaya using the E-S-QUAL model developed by Parasuraman et al. (2005). Data were collected through an online questionnaire from 100 student users of SIMTEP selected from a population of 9,663 students using the Taro Yamane (Slovin) formula. The research instrument includes seven dimensions of electronic service quality (Efficiency, System Availability, Fulfillment, Privacy, Responsiveness, Compensation, and Contact) and the User Satisfaction variable. The data were then analyzed using the PLS-SEM method with the assistance of SmartPLS software through the evaluation of the outer model and inner model to test validity, reliability, and the relationships between variables in the study.

3. RESULTS AND DISCUSSION

3.1 Demographic Characteristic of Respondents

This study involved 100 respondents who were active students of Universitas Negeri Surabaya from various faculties.

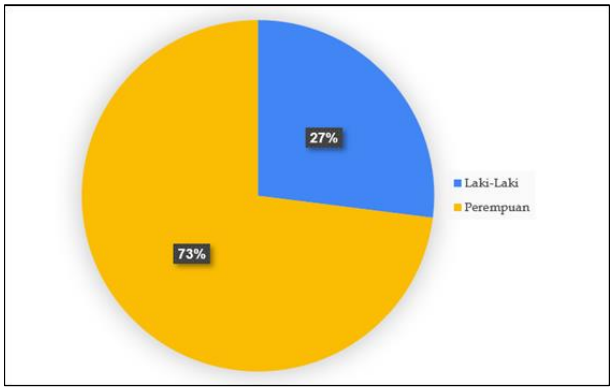

Figure 2. Percentage of Respondents by Gender

The majority of those who took the survey were women (73%), with men making up 27%.

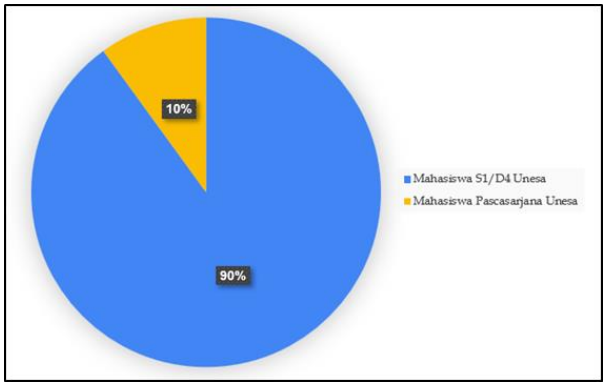

Figure 3. Percentage of Participant Categories

Based on the education level, the majority of respondents were undergraduate students (S1/D4) with a proportion of 90%, while postgraduate students accounted for 10%.

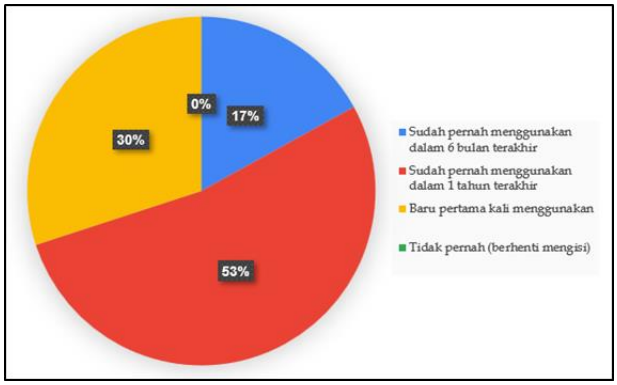

Figure 4. Percentage of User Status

Based on SIMTEP usage experience, 53% of respondents had used the system within the last year, 17% within the last six months, and 30% were first-time users.

3.2 Validity Test

If the value of r_count is more than r_table or the significance value (p-value < 0.05) is less than one, then the statement item is considered legitimate.

Table 1. Instrument Validity Test Results

No	Indicator	r_{count}	r_{table}	Remarks
1	X1.1	0.808	0.361	Valid
2	X1.2	0.813	0.361	Valid
3	X1.3	0.822	0.361	Valid
4	X1.4	0.764	0.361	Valid
5	X2.1	0.821	0.361	Valid
6	X2.2	0.905	0.361	Valid
7	X2.3	0.815	0.361	Valid
8	X3.1	0.910	0.361	Valid
9	X3.2	0.899	0.361	Valid
10	X4.1	0.757	0.361	Valid
11	X4.2	0.846	0.361	Valid
12	X5.1	0.842	0.361	Valid
13	X5.2	0.890	0.361	Valid
14	X6.1	0.917	0.361	Valid
15	X6.2	0.928	0.361	Valid
16	X7.1	0.906	0.361	Valid
17	X7.2	0.893	0.361	Valid
18	Y1	0.878	0.361	Valid
19	Y2	0.939	0.361	Valid

All items on the questionnaire are deemed legitimate as their r_count values are higher than the r_table value of 0.361, as seen in the validity test findings.

3.3 Reliability Test

An instrument is considered reliable if it has a Cronbach's Alpha value ≥ 0.70, indicating that the instrument has good internal consistency and is suitable for further data analysis.

Table 2. Instrument Reliability Test Results

No	Indicator	Cronbach's Alpha	Cronbach's Alpha Standard Value	Remarks
1	*Efficiency*	0.813	0.70	Reliable
2	*Fulfillment*	0.843	0.70	Reliable
3	*System Availability*	0.896	0.70	Reliable
4	*Privacy*	0.834	0.70	Reliable
5	*Responsiveness*	0.874	0.70	Reliable
6	*Compensation*	0.904	0.70	Reliable
7	*Contact*	0.893	0.70	Reliable
8	*User Satisfaction*	0.894	0.70	Reliable

Additional analysis may be conducted using the research instrument as the reliability test using Cronbach's Alpha reveals values above 0.70 for all variables.

3.4 Measurement of User Satisfaction Level

Table 3. User Satisfaction Interpretation

Indicator		Average Value	Score Value	Remarks
Efficiency	X1.1	4.29	4.33	Very satisfied
	X1.2	4.34		
	X1.3	4.31		
	X1.4	4.38		
Fulfillment	X2.1	4.31	4.29	Very satisfied
	X2.2	4.23		
	X2.3	4.33		
System Availability	X3.1	4.12	4.13	Satisfied
	X3.2	4.14		
Privacy	X4.1	3.29	3.205	Quite satisfied
	X4.2	3.12		
Responsiveness	X5.1	4.15	4.155	Satisfied
	X5.2	4.16		
Compensation	X6.1	3.49	3.485	Satisfied
	X6.2	3.48		
Contact	X7.1	4.21	4.225	Very satisfied
	X7.2	4.24		
User Satisfaction	Y1	4.11	4.105	Satisfied
	Y2	4.10		
Average Satisfied			**3.99**	**Satisfied**

The analysis results show that the average level of SIMTEP user satisfaction is 3.99, which falls into the satisfied category. The Efficiency and Fulfillment dimensions obtained the highest scores and fall into the very satisfied category, suggesting that the system is user-friendly and capable of fulfilling user requirements. Conversely, the Privacy dimension obtained the lowest score, indicating that aspects of security and data protection still need to be improved to increase user trust in the system.

3.5 Measurement Model Analysis (Outer Model)

The PLS-SEM model's indicators and latent constructs were examined using outer model analysis. External loading value indication reliability, Average Variance Extracted (AVE) convergent validity, Composite Reliability (CR) for internal consistency reliability, and discriminant validity are all part of the testing.

1. Indicator Reliability Test

   Indicator reliability is assessed based on outer loading values ≥ 0.70. The results of the analysis using SmartPLS show that all indicators meet the criteria and are therefore declared valid.

Table 4. Indicator Realibility Results

No	Indicator	Result Value Outer Loading	Minimum Outer Loading Value	Remarks
1	X1.1	0.864	0.70	Valid
2	X1.2	0.888	0.70	Valid
3	X1.3	0.876	0.70	Valid
4	X1.4	0.892	0.70	Valid
5	X2.1	0.915	0.70	Valid
6	X2.2	0.898	0.70	Valid
7	X2.3	0.899	0.70	Valid
8	X3.1	0.952	0.70	Valid
9	X3.2	0.948	0.70	Valid
10	X4.1	0.838	0.70	Valid
11	X4.2	0.973	0.70	Valid
12	X5.1	0.966	0.70	Valid
13	X5.2	0.952	0.70	Valid
14	X6.1	0.949	0.70	Valid
15	X6.2	0.797	0.70	Valid
16	X7.1	0.960	0.70	Valid
17	X7.2	0.962	0.70	Valid
18	Y1	0.954	0.70	Valid
19	Y2	0.948	0.70	Valid

2. Convergent Validity Test (AVE)

   Convergent validity is tested using **AVE ≥ 0.50**, while construct reliability is assessed through **CR ≥ 0.70**. The analysis results show that all variables meet both criteria.

Table 5. Convergent Validity Results

No	Indicator	Results AVE Value	Value AVE ≥ 0,50	Remarks
1	*Efficiency*	0.775	0.50	Valid
2	*Fulfillment*	0.818	0.50	Valid
3	*System Availability*	0.903	0.50	Valid
4	*Privacy*	0.824	0.50	Valid
5	*Responsiveness*	0.920	0.50	Valid
6	*Compensation*	0.768	0.50	Valid
7	*Contact*	0.923	0.50	Valid
8	*User Satisfaction*	0.905	0.50	Valid

3. Discriminant Validity Test

Researcher used HTMT and the Fornell-Larcker Criterion to check for discriminant validity. Discriminant validity is good for all variables because HTMT values are all less than 0.90 and AVE square roots are larger than construct correlations.

4. Internal Consistency Reliability Test (CR)

In general, the research model's indicators and constructs satisfy the reliability and validity requirements, making it possible to move on with the structural model analysis stage (inner model).

Table 6. Internal Consistency Reliability Results

No	Indicator	Result CR Value	Value CR ≥ 0,70	Remarks
1	*Efficiency*	0.932	0.70	Reliabel
2	*Fulfillment*	0.931	0.70	Reliabel
3	*System Availability*	0.949	0.70	Reliabel
4	*Privacy*	0.903	0.70	Reliabel
5	*Responsiveness*	0.958	0.70	Reliabel
6	*Compensation*	0.868	0.70	Reliabel
7	*Contact*	0.960	0.70	Reliabel
8	*User Satisfaction*	0.950	0.70	Reliabel

5. Discussion of Measurement Model Analysis (Outer Model)

The PLS-SEM analysis determined that all of the study's constructs were feasible based on the examination of indicator reliability, convergent validity, discriminant validity, and internal consistency reliability. This means that the research tool may be officially recognized as legitimate and reliable, and that the model can move on to the structural model analysis (inner model) phase, where the research hypotheses will be tested by examining the connections between variables.

3.6 Structural Model Analysis (Inner Model)

Once the measurement model was shown to be valid and trustworthy, structural model analysis, also known as the inner model, was used to assess the connections between latent components. The model's predictive power and the impact of external factors on internal factors

are the foci of this assessment. The inner model evaluation in the PLS-SEM approach incorporates the following metrics: Path Coefficient, Cross-validated Redundancy, Effect Size, and Coefficient of Determination (R^2).

1. Coefficient of Determination Test (R^2)

   The R^2 value is used to measure the ability of independent variables to explain the variance of the dependent variable. The analysis results using SmartPLS show an R^2 adjusted value of 0.597 for the User Satisfaction variable, which falls into the moderate category. This indicates that the variables Efficiency, Fulfillment, System Availability, Privacy, Responsiveness, Compensation, and Contact are able to explain 59.7% of the variation in SIMTEP UNESA user satisfaction, while the remaining percentage is influenced by other factors outside the research model.

2. Effect Size Test (f^2)

   Every independent variable's contribution to the dependent variable may be found using the Effect **Size** (f^2) test.

Table 7. Effect Size (f^2) Results

No	Indicator	Result Value f^2	Remarks
1	*Efficiency → User Satisfaction*	0.102	Medium
2	*Fulfillment → User Satisfaction*	0.116	Medium
3	*System Availability → User Satisfaction*	0.002	Low
4	*Privacy → User Satisfaction*	0.140	Medium
5	*Responsiveness → User Satisfaction*	0.060	Low
6	*Compensation → User Satisfaction*	0.001	Low
7	*Contact → User Satisfaction*	0.099	Medium

The results show that Fulfillment and Privacy have relatively greater contributions compared to other variables, while Compensation and System Availability have the lowest contributions to User Satisfaction.

3. Cross-Validated Redundancy Test (Q^2)

   By utilizing the blindfolding technique, the Q^2 test evaluates the model's predictive capabilities. All of the indicator Y1 and Y2 Q^2 predict values presented in the analysis are positive ($Q^2 > 0$), with 0.546 and 0.463, respectively, for indicator Y1. This proves that the model is highly relevant for predicting user satisfaction.

4. Path Coefficient Test

   Using the bootstrapping process and a p-value < 0.05 as a criteria, the path coefficient test was run to determine the direction and significance of correlations between constructs.

Table 8. Path Coefficient Results

No	Indicator	P-Value Results	Result P-Value	Remarks
1	*Efficiency → User Satisfaction*	0.002	≤ 0,05	Significant
2	*Fulfillment → User Satisfaction*	0.001	≤ 0,05	Significant
3	*System Availability → User Satisfaction*	0.640	≤ 0,05	Not significant
4	*Privacy → User Satisfaction*	0.002	≤ 0,05	Significant
5	*Responsiveness → User Satisfaction*	0.007	≤ 0,05	Significant
6	*Compensation → User Satisfaction*	0.808	≤ 0,05	Not significant
7	*Contact → User Satisfaction*	0.003	≤ 0,05	Significant

The test results show that Efficiency, Fulfillment, Privacy, Responsiveness, and Contact have a significant influence on User Satisfaction, while System Availability and Compensation do not show a significant influence.

3.7 Hypothesis Testing Analysis

Hypothesis testing was conducted using the bootstrapping method in the PLS-SEM approach to determine the significance of relationships between variables. A t-statistic of 1.96 or less, or a p-value of less than or equal to 0.05, is required for the acceptance of a hypothesis.

Table 9. Hypothesis Test Results

No	Indicator	T-statistic results	P-Value	Remarks
1	*Efficiency → User Satisfaction*	3.033	0.002	Accepted
2	*Fulfillment → User Satisfaction*	3.342	0.001	Accepted
3	*System Availability → User Satisfaction*	0.468	0.640	Rejected
4	*Privacy → User Satisfaction*	3.134	0.002	Accepted
5	*Responsiveness → User Satisfaction*	2.687	0.007	Accepted
6	*Compensation → User Satisfaction*	0.242	0.808	Rejected
7	*Contact → User Satisfaction*	2.973	0.003	Accepted

The test results show that “Efficiency, Fulfillment, Privacy, Responsiveness, and Contact significantly influence User Satisfaction, while System Availability and Compensation do not have a significant influence in the research model”.

3.8 Results of Hypothesis Measurement Analysis

Based on the structural model analysis, most dimensions in the E-S-QUAL and E-RecS-QUAL models influence User Satisfaction in the use of SIMTEP UNESA.

1. H1: “The effect of Efficiency on User Satisfaction is accepted, indicating that ease of use and system access efficiency increase user satisfaction.
2. H2: The effect of Fulfillment on User Satisfaction is accepted, meaning that service suitability and information accuracy contribute to user satisfaction.

3. H3: The effect of System Availability on User Satisfaction is rejected, indicating that system stability does not significantly influence user satisfaction in this study.
4. H4: The effect of Privacy on User Satisfaction is accepted, indicating that data protection and information security are important factors in increasing user satisfaction.
5. H5: The effect of Responsiveness on User Satisfaction is accepted, indicating that service responsiveness in handling user issues influences user satisfaction.
6. H6: The effect of Compensation on User Satisfaction is rejected, indicating that service compensation is not a major factor in shaping user satisfaction.
7. H7: The effect of Contact on User Satisfaction is accepted, indicating that ease of communication and access to assistance contribute to improving user satisfaction".

CONCLUSION

This study aims to analyze the level of user satisfaction with the SIMTEP Unesa system and the influence of system quality variables on user satisfaction. The results show that the level of user satisfaction falls into the satisfied category with an average value of 3.99. The SEM-PLS analysis indicates that the variables Efficiency, Fulfillment, Privacy, Responsiveness, and Contact significantly influence user satisfaction, while System Availability and Compensation do not have a significant influence. These findings indicate that SIMTEP Unesa user satisfaction is influenced by several system quality factors that are directly perceived by users. This study contributes to identifying important factors affecting user satisfaction in academic information systems and can serve as a basis for system evaluation and development, as well as a reference for future research with additional variables or different analytical approaches.

REFERENCES

[1] L. Von Bertalanffy, G. Braziller, and N. York, "General System Theory Foundations, Development, Applications," *IEEE Trans. Syst. Man Cybern.*, vol. 4 No. 6, pp. 592–592, 1968, doi: 10.1109/TSMC.1974.4309376.

[2] D. T. Bourgeois, *Information Systems for Business and Beyond*. Saylor Foundation, 2014. [Online]. Available: http://www.saylor.org/courses/bus206

[3] C. E. Shannon, "A Mathematical Theory of Communication," *The Bell System Technical Journal*, vol. 27, pp. 623–656, 1948, doi: 10.1002/j.1538-7305.1948.tb01338.x.

[4] K. C. . Laudon and J. P. . Laudon, *Management information systems : managing the digital firm*. Pearson, 2017.

[5] D. Herlinudinkhaji and L. Kurnia Ramadhani, "Tata Kelola Layanan Teknologi Informasi dengan ITIL V4 untuk Estimasi Layanan," *remik*, vol. 7, no. 1, pp. 452–457, Jan. 2023, doi: 10.33395/remik.v7i1.12058.

[6] P. Hayati, A. Luthfi Fadhilah Syarthony, S. Nabila, A. Novita Syahfitri, and D. Widya Pradana, "Teknologi Informasi dan Kinerja Perguruan Tinggi," *Journal of Student Research*, vol. 2, no. 6, pp. 20–27, Nov. 2024, doi: 10.55606/jsr.v2i6.3410.

[7] Pusat Bahasa Unesa, "Test of English Proficiency (TEP)." Accessed: Aug. 29, 2025. [Online]. Available: http://pusatbahasa.unesa.ac.id/page/test-of-english-proficiency-tep

[8] W. H. DeLone and E. R. McLean, "The DeLone and McLean model of information systems success: A ten-year update," in *Journal of Management Information Systems*, M.E. Sharpe Inc., 2003, pp. 9–30. doi: 10.1080/07421222.2003.11045748.

[9] P. Kotler, "Marketing Management, Millenium Edition," *Modern Economy*, vol. 7 No. 12, p. 728, 2000, [Online]. Available: www.pearsoncustom.com

[10] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Q.*, vol. 13, no. 3, pp. 319–339, 1989, doi: 10.2307/249008.

[11] Nurohman and Nurhayati, "Academic Information System User Satisfaction Model Using Technology Acceptance Model (TAM) With End User Computing Satisfaction (EUCS) Modification," 2021. doi: 10.15408/aism.v3i2.14516.
[12] A. Wardhana, *Perilaku Konsumen di Era Digital Penerbit CV.Eureka Media Aksara*. Deepublish, 2024. [Online]. Available: https://www.researchgate.net/publication/377159817
[13] A. Parasuraman, V. A. Zeithaml, and A. Malhotra, "E-S-QUAL a multiple-item scale for assessing electronic service quality," *J. Serv. Res.*, vol. 7, no. 3, pp. 213–233, Feb. 2005, doi: 10.1177/1094670504271156.
[14] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "A Conceptual Model of Service Quality and Its Implications for Future Research," *J. Mark.*, vol. 49, no. 4, p. 41, Autumn 1985, doi: 10.2307/1251430.
[15] F. Sjahroeddin, "The Role of E-S-Qual and Food Quality on Customer Satisfaction in Online Food Delivery Service," 2018.
[16] R. Ramadania, "E-S-Qual and E-Recs-Qual Toward Customer Satisfaction, Trust and Loyalty in Electronic Banking Services During The Covid-19 Pandemic," *Matrik : Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan*, p. 100, May 2021, doi: 10.24843/matrik:jmbk.2021.v15.i01.p09.
[17] A. Mulyanto and M. Istoningtyas, "Analisis Kepuasan Pengguna Aplikasi ChatGPT Menggunakan Metode E-Serqual (Studi Kasus : Mahasiswa/I Universitas Dinamika Bangsa)," *Jurnal Manajemen Teknologi dan Sistem Informasi (JMS)*, vol. 4 No. 2, 2024.
[18] LPM Unesa, "SURVEI." Accessed: Sep. 17, 2025. [Online]. Available: https://lpm.unesa.ac.id/page/survei
[19] E. Istianah and W. Yustanti, "Analisis Kepuasan Pengguna pada Aplikasi Jenius dengan Menggunakan Metode EUCS (End-User Computing Satisfaction) berdasarkan Perspektif Pengguna," *Journal of Emerging Information Systems and Business Intelligence (JEISBI)*, vol. 3 No. 24, pp. 36–44, 2022, doi: https://doi.org/10.26740/jeisbi.v3i4.47882.
[20] Lawal M, Obisesan K O, Yusuff K M, and Owolabi A A, "On The Comparison of Some Methods of Allocation in Stratified Random Sampling for Skewed Population," *International Journal of Mathematics and Statistics Studies*, vol. 6, no. 3, pp. 29–42, 2018, [Online]. Available: www.eajournals.org
[21] D. A. Universitas Negeri Surabaya, "Pangkal Data Universitas Negeri Surabaya," https://pd-unesa.unesa.ac.id/.
[22] Sugiyono. Dr. Prof, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Penerbit ALFABETA Bandung, 2023. [Online]. Available: www.cvalfabeta.com
[23] P. Muslim Rasmanna, Y. Utami, and S. Pelita Nusantara Medan, "Uji Validitas dan Uji Reliabilitas Instrument Penilaian Kinerja Dosen," *Jurnal Sains dan Teknologi*, vol. 4, no. 2, pp. 21–24, 2023.
[24] D. Rianto Rahadi, *Pengantar Partial Least Square Strctural Equation Model (PLS-SEM)*. Lentera Ilmu Madan, 2023. Accessed: Oct. 28, 2025. [Online]. Available: https://www.researchgate.net/publication/372827232_PENGANTAR_PARTIAL_LEAST_SQUARES_STRUCTURAL_EQUATION_MODELPLS-SEM_2023
[25] R. S. Putri, S. Astiti, and R. N. S. Amriza, "Analisis Kepuasan Konsumen Terhadap Kualitas Pelayanan E-Commerce Jd.Id Menggunakan Metode E-Servqual," *JURNAL MEDIA INFORMATIKA BUDIDARMA*, vol. 6, no. 2, p. 1207, Apr. 2022, doi: 10.30865/mib.v6i2.3893.