

Proceeding Paper

User Satisfaction Measurement of Academic Information Systems at STIAB Jinarakkhita Lampung

Kadek Deva Agastya¹, Prima Angkupi², Achmad Bagas Pangestu³, Andala Rama Putra Barusman⁴, Agus Purnomo⁵

Universitas Bandar Lampung ^{1,2}; andala@ubl.ac.id

Abstract

The rapid advancement of information technology has significantly impacted the education sector, making Academic Information Systems (AIS) essential for managing and disseminating educational information efficiently. This study aims to measure user satisfaction with the Academic Information System (SIKAD) at STIAB Jinarakkhita Lampung using the End User Computing Satisfaction (EUCS) model. A quantitative research design was employed, involving 194 students selected through stratified random sampling. Data were collected via a structured questionnaire and analyzed using SPSS software. The results indicate that while all dimensions of the EUCS model collectively influence user satisfaction, Format and Timeliness are the most critical factors. The findings provide valuable insights for improving AIS in higher education institutions, ensuring they meet user expectations and enhance overall satisfaction

Keywords: Employee Quality, Work Discipline, Employee Productivity

1. Introduction

Rapid advancement of information technology has profoundly transformed various sectors, with education being one of the most significantly impacted areas (Hafidz & Sharma, 2022). As educational institutions increasingly rely on digital tools to enhance their operations, Academic Information Systems (AIS) have emerged as essential components in managing and disseminating educational information efficiently (Villegas-Ch et al., 2020). These systems streamline administrative tasks, support academic processes, and facilitate communication between students, faculty, and administration, making them indispensable in modern educational environments (Erlina, 2023; Grepon et al., 2022; Jainah, 2023; Rusli, Ompu Jainah, et al., 2019).

Despite the technological sophistication of AIS, their effectiveness is not solely determined by their functionality but is largely influenced by the satisfaction of their users (Nabi & Holden, 2008). User satisfaction plays a critical role in determining how well these systems are adopted and utilized within educational institutions (Wilona & Defrizal, 2024). Without high levels of user satisfaction, even the most advanced AIS may fail to meet their intended goals, leading to underutilization or resistance from the academic community (In & Lee, 2017).

This study specifically focuses on measuring the user satisfaction of the Academic Information System (SIKAD) at Sekolah Tinggi Ilmu Agama Buddha (STIAB) Jinarakkhita Lampung, a higher education institution in Indonesia. The study employs the End User Computing Satisfaction (EUCS) model, a widely recognized framework for assessing user satisfaction with computer-based systems, to evaluate the effectiveness of SIKAD from the perspective of its end users—students, faculty, and administrative staff.

Although there has been extensive research on AIS globally, there remains a significant gap in understanding the specific factors that influence user satisfaction within the context of Indonesian higher education institutions (Barusman & Habiburrahman, 2022; Erlina, 2023; Seregig et al., 2021; Zaini & Hakim, 2019). The unique cultural, organizational, and technological characteristics of these institutions necessitate a tailored approach to assessing and improving AIS. This research seeks to address this gap by providing empirical evidence on the determinants of user satisfaction in SIKAD, offering insights that could inform the design, implementation, and management of AIS in similar educational contexts across Indonesia and beyond. Through this study, we aim to contribute to the

ongoing discourse on enhancing the effectiveness of AIS by prioritizing user satisfaction as a key measure of success.

This study uses a quantitative approach to examine the factors affecting user satisfaction with the Academic Information System (SIKAD) at STIAB Jinarakkhita Lampung. By applying the End User Computing Satisfaction (EUCS) model, which includes five key dimensions—Content, Accuracy, Format, Ease of Use, and Timeliness—the study aims to understand how these aspects influence overall satisfaction. Data was collected from 194 students using a structured questionnaire, and the results were analyzed using SPSS software (Chen, 2022; Jainah, 2023; Rusli, Jainah, et al., 2019; Rusli & Ompu Jainah, 2024). The analysis included various tests, such as validity, reliability, normality, multicollinearity, and multiple linear regression, to identify which factors most significantly impact user satisfaction.

2. Research Method

In this research, there are two approaches used to overcome problems, namely the normative juridical approach and the empirical approach. The normative juridical approach is used in legal research to study certain legal phenomena through analysis and examination of legal facts, as well as seeking solutions to problems that arise. This research also includes an empirical approach by researching and collecting primary data directly related to the Analysis of the Implementation of Regulation of the Minister of Agrarian Affairs/Head of the National Land Agency No. 19 of 2020 concerning Electronic Land Information Services, especially regarding the electronic certificate checking service process at the Way Kanan Regency Land Office.

Data sources in this research consist of secondary data and primary data. Secondary data sources involve literature, legal journals, legal dictionaries, newspapers, print media, and electronic media. The types of data used include secondary data and primary data. Secondary data was obtained from the literature study, while primary data was obtained from the results of field research by conducting direct observations and interviews regarding the implementation of these regulations at the Way Kanan Regency Land Office.

The data collection procedure involved a literature study to collect secondary data, while the field study was carried out using direct observation and interview techniques at the Way Kanan District Land Office. Data processing involves classification, inventory, and systematization of data to facilitate analysis. The data analysis used is descriptive-qualitative, which combines field data and literature to provide an in-depth understanding of the implementation of these regulations.

This research is qualitative in nature, where the findings do not depend on statistical procedures or calculations, but rather on an in-depth understanding of the phenomenon being studied. Qualitative methods are used to uncover and understand unknown aspects, provide insight into new things, and provide complex details about phenomena that are difficult to express.

3. Result and Discussion

Validity and Reliability

The validity tests confirmed that all indicators for the variables—Content, Accuracy, Format, Ease of Use, Timeliness, and User Satisfaction—were valid, effectively measuring the intended constructs within the Academic Information System (SIKAD). Reliability analysis, conducted using Cronbach's Alpha, indicated that all variables had values exceeding 0.600. This suggests that the measurement scales used in this study were both reliable and consistent, aligning with established criteria for high-quality research instruments. These findings underscore the dependability of the data collected, supporting the robustness of the study's conclusions.

Table 1. Validity Test

semester/class	Population	Sample
Semester 2	65	42
Semester 4	46	30
Semester 6	45	29
Semester 7	38	25

Total	194	126
Resource: Processed Data		

Normality, Multicollinearity, and Heteroscedasticity

The normality of the data was assessed using the Kolmogorov-Smirnov test, which revealed that the data followed a normal distribution (p-value = 0.16, greater than the 0.05 threshold). This result confirms that the data meet one of the essential assumptions for conducting multiple linear regression analysis. The multicollinearity test, measured through the Variance Inflation Factor (VIF), showed no significant issues, with all VIF values below 10. This indicates that the independent variables—Content, Accuracy, Format, Ease of Use, and Timeliness—were not excessively correlated with each other. Additionally, the heteroscedasticity test demonstrated no problems (significance of t and F-tests > 0.05), confirming that the residuals of the regression model exhibited constant variance, fulfilling the homoscedasticity assumption.

Regression Analysis

The multiple linear regression analysis revealed a strong correlation between the independent variables and user satisfaction, with an R value of 0.814. This indicates a substantial positive relationship, with 66.3% of the variance in user satisfaction explained by the independent variables. The F-test results were significant (p-value < 0.05), confirming that the independent variables collectively have a meaningful impact on user satisfaction. However, the t-test results highlighted that only two dimensions—Format and Timeliness—had a significant partial effect on user satisfaction. This suggests that, while all dimensions of the End User Computing Satisfaction (EUCS) model contribute to overall satisfaction, Format and Timeliness are particularly influential factors.

4. Interpretation

The findings suggest that although all dimensions of the EUCS model play a role in determining user satisfaction, Format and Timeliness are the most critical factors for users of SIAKAD. This indicates that users place a high value on the presentation and accessibility of information, as well as the promptness with which it is delivered. Such insights align with previous research but also highlight the specific needs within the context of Indonesian higher education institutions, where effective communication and timely updates are crucial for enhancing student satisfaction. These results underscore the importance of tailoring Academic Information Systems to meet the particular needs of their user base, ensuring that the systems are not only functional but also user-friendly and responsive.

5. Conclusion

In summary, this study offers valuable insights into the factors influencing user satisfaction with the SIAKAD system at STIAB Jinarakkhita Lampung. The results indicate that while all dimensions of the EUCS model are important, Format and Timeliness are particularly significant in enhancing user satisfaction. These findings can inform the development and refinement of AIS in higher education, ensuring that systems meet user expectations and improve overall effectiveness. Future research should explore additional factors affecting user satisfaction and consider longitudinal studies to assess changes over time, as well as extend the research to other educational settings to validate these findings.

35

29

51

References

- Barusman, A. R. P., & Habiburrahman, H. (2022). The role of supply chain management and competitive advantage on the performance of Indonesian SMEs. *Uncertain Supply Chain Management*, 10(2), 409–416. <https://doi.org/10.5267/j.uscm.2021.12.011>
- Chen, W. (2022). International Students' Online Learning Satisfaction Model Construction, Validation and Affecting Factors Analysis. *Open Journal of Social Sciences*, 10(07), 175–185. <https://doi.org/10.4236/jss.2022.107015>
- Enakesda, R., & Jainah, Z. O. (2024). Reposisi peran justice collaborator dalam upaya memberantas tindak pidana korupsi. *INNOVATIVE: Journal Of Social Science Research*, 4(1), 4396–4408.
- Erlina, B. (2023). Implementation of legal protections of geographical indications of Lampung robusta coffee in improving the economy of west Lampung coffee farmers. *PENA JUSTISIA: MEDIA KOMUNIKASI DAN KAJIAN HUKUM*, 22(1).
- Grepon, B. G., Baran, N., Gumonan, K. M. V., Martinez, A. L., & Lacs, M. L. (2022). Designing and Implementing e-School Systems: An Information Systems Approach to School Management of a Community College in Northern Mindanao, Philippines. *International Journal of Computing Sciences Research*, 6, 792–808. <https://doi.org/10.25147/ijcsr.2017.001.1.74>
- Hafidz, Q., & Sharma, M. (2022). Understanding the Potential of Indonesian Museums. *Jurnal AKSI (Akuntansi Dan Sistem Informasi)*, 7(2). <https://doi.org/10.32486/aksi.v7i2.413>
- Hakim, L., Mulyati, E., Hasan, D., & Murwadi, T. (2020). Legal aspects of micro business development institutions in state purpose of welfare. *Fiat Justisia: Jurnal Ilmu Hukum*, 14(3), 247–260. <https://doi.org/10.25041/fiatjustisia.v14no3.1804>
- In, J., & Lee, S. (2017). Statistical data presentation. *Korean J Anesthesiol*, 70(3), 267–276. <https://doi.org/10.4097/kjae.2017.70.3.267>
- Jainah, Z. O. (2023). Implementation of criminal sanctions against foreign narcotics courier performer. *PENA JUSTISIA: MEDIA KOMUNIKASI DAN KAJIAN HUKUM*, 22(1).
- Nabi, G., & Holden, R. (2008). Graduate entrepreneurship: intentions, education and training. *Education + Training*, 50(7), 545–551. <https://doi.org/10.1108/00400910810909018>
- Rusli, T., Jainah, O., & Ritonga, R. (2019). Corporate social accountability model as a form of future national economic development. *International Journal of Innovation, Creativity and Change*, 6(10), 54–70. www.ijicc.net
- Rusli, T., & Ompu Jainah, Z. (2024). Protection and legal security system for digital signature users as consumers In the Indonesian legal system. *PENA JUSTISIA: MEDIA KOMUNIKASI DAN KAJIAN HUKUM*, 23(2).
- Rusli, T., Ompu Jainah, Z., Safitri, M., & Ritonga, R. (2019). Competitive Enhancement Efforts of Domestic Agribusiness with Preservation of Plant Variations. In *International Journal of Innovation, Creativity and Change*. www.ijicc.net (Vol. 6). www.ijicc.net
- Seregig, I. K., Hartono, B., & Ndari, Y. (2021). Policy on overcoming village budget deviations by the government internal supervisory apparatus in indonesia (case study of Tanjungsari village, Lampung). *Cepalo*, 5(1), 23–38. <https://doi.org/10.25041/cepalo.v5no1.2211>
- Smith, N., Surapati, A., Triatna, B., Santoso, J., & Jainah, Z. O. (2024). Penegakan hukum terhadap penyalahgunaan dan pencegahan pengguna narkoba di Indonesia. *INNOVATIVE: Journal Of Social Science Research*, 4(1), 3037–3048.
- Villegas-Ch, W., Román-Cañizares, M., & Palacios-Pacheco, X. (2020). Improvement of an online education model with the integration of machine learning and data analysis in an LMS. *Applied Sciences (Switzerland)*, 10(15). <https://doi.org/10.3390/APP10155371>
- Wilona, N. N., & Defrizal, D. (2024). The Influence of Leadership Style and Work Environment on the Performance. *International Journal of Accounting, Management, Economics and Social Sciences (IJAMESC)*, 2(1), 13–23. <https://doi.org/10.61990/ijamesc.v2i1.171>
- Zaini, Z. D., & Hakim, L. (2019). Prevention and Handling of the Crisis of Financial Systems in Banking Institutions. *FIAT JUSTISIA: Jurnal Ilmu Hukum*, 13(2), 151. <https://doi.org/10.25041/fiatjustisia.v13no2.1567>