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THE IMPACT OF SERVICE DIGITALIZATION, SERVICE QUALITY, AND OPERATIONAL EFFICIENCY ON STUDENT SATISFACTION IN USING CAMPUS FACILITIES

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Abstract :

The development of digital technology has transformed the landscape of higher education institutions, demanding adaptation in the provision of services to students. UINSU, the State Islamic University of North Sumatra, has strived to improve the quality of campus services through digitalization, improved service quality, and operational efficiency. This study analyzes the influence of service digitalization, service quality, and operational efficiency on student satisfaction in using campus facilities at the State Islamic University of North Sumatra (UINSU). Using an associative quantitative method with 100 active UINSU student respondents, this study found that service digitalization and student happiness were positively and significantly influenced by service quality. Improved ease of access to information, speed of administrative processes, and the quality of interactions and physical facilities contributed to positive student experiences. However, operational efficiency showed a negative and significant influence on student satisfaction, indicating a dissonance between campus efficiency efforts and student perceptions and comfort. These findings emphasize the importance of UINSU balancing efficiency with student needs and expectations to ensure an optimal learning experience.

Keywords : *Service Digitalization, Service Quality, Operational Efficiency, Student Satisfaction, Campus Facilities*

Abstrak :

Perkembangan teknologi digital telah mengubah lanskap institusi pendidikan tinggi, menuntut adaptasi dalam penyediaan layanan kepada mahasiswa. UINSU, Universitas Islam Negeri Sumatera Utara, telah berupaya untuk meningkatkan kualitas pelayanan kampus melalui digitalisasi, peningkatan mutu layanan, dan Operational Efficiency. Penelitian ini menganalisis pengaruh Digitalization of Services, Quality of Service, dan Operational Efficiency terhadap Student Satisfaction dalam penggunaan fasilitas kampus Universitas Islam Negeri Sumatera Utara (UINSU). Menggunakan metode kuantitatif asosiatif dengan 100 responden mahasiswa aktif UINSU, studi ini menemukan bahwa Digitalization of Services dan Kebahagiaan siswa dipengaruhi secara positif dan signifikan oleh Quality of Service. Peningkatan kemudahan akses informasi, kecepatan proses administrasi, serta mutu interaksi dan fasilitas fisik berkontribusi pada pengalaman positif mahasiswa.

Namun, Operational Efficiency menunjukkan pengaruh negatif dan signifikan terhadap Student Satisfaction, mengindikasikan adanya disonansi antara upaya efisiensi kampus dengan persepsi dan kenyamanan mahasiswa. Temuan ini menekankan pentingnya UINSU untuk menyeimbangkan efisiensi dengan kebutuhan dan harapan mahasiswa guna memastikan pengalaman belajar yang optimal.
Kata Kunci: *Digitalization of Services, Quality of Service, Operational Efficiency, Student Satisfaction, Fasilitas Kampus*

INTRODUCTION

Digital developments have transformed the way higher education institutions operate, interact, communicate, and provide services to students through technological advancements (Hutapea, et.al., 2024). In general, student satisfaction is supported by three factors: service digitalization, service quality, and operational efficiency, and this is crucial for institutions. According to (Assyahri, W., 2023), service is any action or deed carried out by an individual or organization with the aim of satisfying customers or clients. These actions are carried out directly to fulfill customer desires for the products or services they require (Anika, et.al., 2023). Service quality can be defined as the level of student satisfaction. Student satisfaction can be determined by comparing the actual service received with the type of service expected by students. Services that satisfy and meet or exceed student expectations are considered high quality (Anshar, et al, 2022).

Service digitalization is a strategic step believed to increase efficiency, transparency, and service quality on campus (Yudi Siswadi, 2022). By utilizing information technology, various administrative processes can be completed more quickly and effectively (Prameswari, et.al., 2022). Furthermore, easily accessible information, even for students located far from campus, contributes to the ease and convenience of accessing educational services. This convenience directly impacts student satisfaction, as they feel more supported, less burdened by complicated bureaucratic processes, and receive fair and modern service (Mahmudah & Rahmatika, 2021).

Operational efficiency is a crucial aspect of service delivery, as it involves providing affordable, effective, and high-quality services. Achieving optimal efficiency requires a strong internal control system, particularly in fostering a culture of innovation on campus (Rokan, et.al., 2022). Through high operational efficiency, campuses can reduce costs, increase staff productivity, and improve the quality of service outcomes, such as speed of administrative processes and accuracy of information (Batubara & Anggraini, 2022). This directly contributes to student satisfaction, as they benefit from more responsive, time-saving services tailored to their academic needs (Darwin, et al, 2014).

Furthermore, when students compare their expectations regarding student services, faculty competency based on infrastructure and leadership, and admissions, they develop a positive attitude toward university educational services, known as student satisfaction (Nasution, et.al, 2020). The various

programs and facilities provided by UINSU, including the achievement-based admissions process and the ongoing development of academic services, contribute to a relatively positive level of student satisfaction, although there is still room for improvement in some aspects of the service (Saputra, et al, 2023).

One of the best universities in the North Sumatra region, the State Islamic University of North Sumatra (UINSU), is not immune to the pressure to adapt to this digital revolution. Various initiatives have been undertaken in recent years to improve the standard of campus services through digitalization, improved service quality, and operational efficiency. Based on the results of a student satisfaction survey regarding student services, such as digitalization, most students felt that while some students were satisfied with the digital services offered by the UINSU campus, others were dissatisfied due to the frequent system errors caused by excessive access to the UINSU website. Based on observations and interviews, students were dissatisfied due to the lack of improvements in the quality of campus services, the speed and ease of access to administrative services, improvements in the quality and quantity of supporting facilities such as study rooms and internet access, and more open and transparent communication regarding campus information. Students were also dissatisfied with operational efficiency. Students were dissatisfied with the operation of the UINSU campus due to the continued occurrence of conflicts in class usage, the selection of teaching times, and the stability of the digital system and services provided.

According to research by (Wahyuningsih & Prabhata, 2024), which employed a descriptive quantitative approach, using samples reflecting data characteristics and analyzing data through classical assumption tests, heteroscedasticity tests, multicollinearity tests, and multiple linear regression, student satisfaction is significantly influenced by the quality of services and facilities offered by institutions, particularly during the COVID-19 pandemic. Student satisfaction is significantly influenced by facilities, and service quality also plays a role.

In a study by (Putri, et al, 2022), a descriptive quantitative research method was used, namely the collection, compilation, processing, and evaluation of numerical data that has undergone specific manipulation and analysis. Questionnaires were used to collect data, and quantitative analysis using descriptive or inferential statistics was conducted to test the hypothesis that the study findings indicate a significant relationship between student satisfaction with Pamulang University's digital services and the quality of those services. Student satisfaction is influenced by the digital service quality variable, as indicated by a significance value of 0.000, which is less than 0.05. Furthermore, with a calculated F-value of 158.657 and a significance level of 0.000, the regression analysis indicates that the model can be used to predict student engagement factors based on digital service quality. Students also experienced obstacles when using e-learning and e-library services, such as server downtime, signal problems, and a limited e-book collection. However, they gave good ratings to digital services, noting an increase in the book

collection.

Findings from (Hasyim, et al, 2023) used a literature review approach, which involved searching and checking for duplicate articles, screening titles and abstracts, and reviewing full-text articles based on predetermined inclusion criteria. Furthermore, an assessment of the quality of literature sources and a synthesis of the literature review revealed that the study's results indicate that an efficient hospital operating system can provide optimal patient care and improve patient satisfaction. Furthermore, operational efficiency is also related to the successful implementation of hospital programs and can be achieved through the use of high-quality and modern information systems that facilitate patient access and support internal hospital controls.

Despite various efforts to improve service digitalization, service quality, and operational efficiency at UINSU, several obstacles remain. Some students still experience difficulties accessing campus digital services, complain about limited facilities, and lack effective campus operational management. Therefore, more in-depth research is needed to examine how service quality, operational efficiency, and digitalization influence student satisfaction with UINSU campus facilities, particularly regarding operational efficiency. Several studies on operational efficiency have been conducted, but most previous studies have focused on the operational efficiency of companies, hospitals, and other businesses. While most studies have focused solely on student satisfaction with facilities and services, few have addressed student satisfaction with campus operational efficiency. This makes this study an interesting topic.

RESEARCH METHOD

The purpose of this study was to determine the influence between factors using a quantitative and associative approach (Rahmani, 2022). Active students of the State Islamic University of North Sumatra (UINSU) participated in this study who used campus facilities for academic and non-academic activities. Sample selection was carried out using a purposive sampling technique, namely by selecting respondents who met certain criteria in accordance with the research objectives. The number of samples was determined based on the theory of (Tanzeh, 2018) which states that the ideal sample size in quantitative research is five to ten times the number of indicators. Because the total indicators in this study were 16, the number of samples used was 100 respondents, which was considered to meet the recommended minimum criteria. Data collection was carried out by respondents being given a questionnaire. Each characteristic was measured using a Likert scale through a series of statements in the questionnaire. Using SmartPLS software, the data obtained were statistically tested using the Partial Least Squares Structural Equation Modeling (PLS-SEM) model. This method was chosen because it does not require a normal data distribution and can be used to analyze the relationship between latent variables with a moderate sample size. The analysis findings indicate that operational effectiveness, service quality, and digitalization significantly and positively influence student

happiness in using campus facilities. These findings indicate that improvements in campus digitalization and operations can directly improve student satisfaction.

Number of variables: 4 (service digitalization, service quality, operational efficiency) Number of indicators per variable: 4

Total Indicators: 4 Variables x 4 indicators = 16

Hair's Theory Formula = Number of indicators x (5 to 10 respondents) Calculation:

1. Minimum sample size: 16 x 5 = 80 respondents
2. Ideal sample size: 16 x 10 = 160 respondents

So, if you use 100 respondents, this has fulfilled the recommendations of Hair's theory, because 100 is between the range of 80-160 so it is valid for use in SEM or multiple regression.

FINDINGS AND DISCUSSION

Demographics

The number of research subjects was 100 people, where the State Islamic University of North Sumatra consists of 8 faculties. The researcher took a sample of around 10 people from each faculty except for the Faculty of Islamic Economics and Business, which had 30 people. Based on age, the majority of respondents were aged 20 to 23 years.

Measurement Model Testing (Outer Model)

By applying the PLS Algorithm using the SmartPLS 3.0 application, the test results for each question in the questionnaire can be observed in the image below:

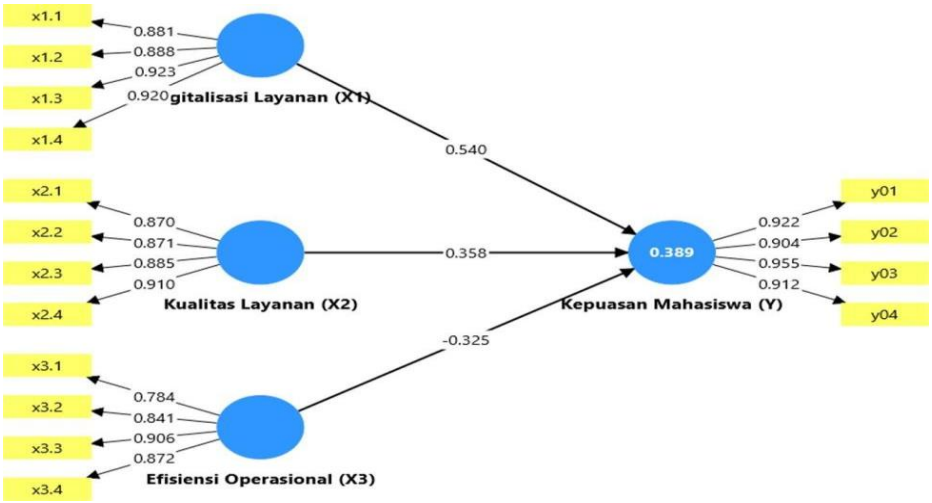

Figure 1. Test Results for Each Item

1. Convergent Validity

Outer Loading, namely measuring how big the correlation or contribution of an indicator (questionnaire question) is to the latent variable (Service digitalization, Service quality, and Operational efficiency). The

following are the results. In this study, the external loading specifically:

Table 1. Outer Loading Test Result Data

	Digitalization of Services (X1)	Operational Efficiency (X3)	Student Satisfaction (Y)	Quality of Service (X2)
x1.1	0.881			
x1.2	0.888			
x1.3	0.923			
x1.4	0.920			
x2.1				0.870
x2.2				0.871
x2.3				0.885
x2.4				0.910
x3.1		0.784		
x3.2		0.841		
x3.3		0.906		
x3.4		0.872		
y01			0.922	
y02			0.904	
y03			0.955	
y04			0.912	

Source: SmartPLS output, 2025

Overall, because the external loading values of the indicators used in this study were greater than 0.70, these indicators met the requirements for convergent validity. This proves the validity of the measurement model and allows for further research because each indicator accurately reflects the construct being tested.

2. Ave Test (Average Variance Extracted)

One method in Structural Equation Modeling (SEM) analysis to assess the convergent validity of a concept or latent variable is the AVE (Average Variance Extracted) test. Simply put, AVE displays the average variance that can be explained by the indicators for their respective constructs. This means that AVE measures how much information the indicators capture compared to noise (measurement error).

Table 2. Ave Test Results

	Average variance extracted (AVE)
Digitalization of Services (X1)	0.816
Operational Efficiency (X3)	0.726
Student Satisfaction (Y)	0.853
Quality of Service (X2)	0.782

Source: SmartPLS output, 2025

Based on the convergent validity test table, all research variables, namely Digitalization of Services (X1), Operational Efficiency (X3), Student

Satisfaction (Y), and Quality of Service (X2), have an Average Variance Extracted (AVE) value greater than 0.50. The highest AVE value is for the Student Satisfaction variable at 0.853, and the lowest value is still valid, namely Operational Efficiency at 0.726. In conclusion, all Because each construct can explain more than half of the variance of its indicator, the variables in this study have strong convergent validity. Consequently, all variables can be considered valid and suitable for use in further analysis.

3. Discriminant Validity Test

To ensure that the latent variable (construct) is discriminatively valid, it is more powerful in measuring its own indicators compared to its correlation with other constructs. If discriminant validity is met, then the research model is considered to have clarity in distinguishing between constructs.

Table 3. Data from the Results of the Discriminant Validity Test

	Digitalization of Services (X1)	Operational Efficiency (X3)	Student Satisfaction (Y)	Quality of Service (X2)
Digitalization of Services (X1)	0.903			
Operational Efficiency (X3)	0.670	0.852		
Student Satisfaction (Y)	0.558	0.277	0.924	
Quality of Service (X2)	0.658	0.670	0.496	0.884

Source: SmartPLS output, 2025

Based on Table 3 above, it can be said that each variable in the model meets the criteria for discriminant validity. This is clearly seen from the fact that each AVE square root value (in green on the diagonal) is higher than the correlation value (values outside the diagonal) between other variables. Therefore, it can be said that each model construct is unique and does not overlap, so the model is declared discriminantly valid.

4. Reliability Test

Testing the ability of an instrument or measuring tool to measure a construct (latent variable) consistently and stably over time or across indicators is known as reliability testing. The findings of this research's reliability test are as follows:

Table 4. Reliability Test Result Data

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Digitalization of Services (X1)	0.925	0.939	0.947
Operational Efficiency (X3)	0.875	0.893	0.914
Student Satisfaction (Y)	0.942	0.948	0.959
Quality of Service (X2)	0.907	0.921	0.935

Source: SmartPLS output, 2025

Based on the reliability test table above, it can be concluded that all variables in the model have met the criteria for good reliability. This is indicated by the Cronbach's Alpha, Composite Reliability (rho_a), and Composite Reliability (rho_c) values for all variables, which are valued above 0.70. These high values indicate that the indicators used in each construct (such as Digitalization of Services, Operational Efficiency, Student Satisfaction, and

Quality of Service) are mutually measurable and consistent in assessing the targeted variables. Therefore, it can be said that this study tool is reliable, indicating that the measurement results are reliable and worthy of further study.

Structural Model Testing

Analyze and understand the relationship between constructs, and significant values.

1. R Square Determinant Coefficient Test

Used to measure the level of influence of the independent variable on the dependent variable. The value of the coefficient of determination, or R Square, is shown as follows:

Table 5. Results of the R Square Determinant Coefficient Test

	R-square	R-square adjusted
Student Satisfaction (Y)	0.389	0.370

Source: SmartPLS output, 2025

Based on the R-square test table, the Student Satisfaction (Y) variable has an R-square value of 0.389, or 38.9%. This indicates that 38.9% of the variation or change in Student Satisfaction can be explained by the independent variables in the overall model, such as Digitalization of Services, Operational Efficiency, and Quality of Service. Even after adjusting for the number of variables in the model, the results still show a fairly strong influence, as indicated by the Adjusted R-square value of 0.370. Because the independent variables in this model account for almost 40% of the variation in Student Satisfaction, this model can be said to have good explanatory power. The remaining 61.1% is likely influenced by external variables not included in this study.

2. Hypothesis Testing (Path Coefficients)

To determine whether the independent variable significantly influences the dependent variable, hypothesis testing will be used. The hypothesis testing for this study is as follows:

Table 6. Hypothesis Test Results (Path Coefficients)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Information
Digitalization of Services (X1) -> Student Satisfaction (Y)	0.540	0.519	0.123	4.396	0.000	Signifikan
Operational Efficiency (X3) -> Student Satisfaction (Y)	-0.325	-0.293	0.128	2.527	0.012	Signifikan
Quality of Service (X2) -> Student Satisfaction (Y)	0.358	0.348	0.121	2.970	0.003	Signifikan

Source: SmartPLS output, 2025

Based on the hypothesis test table, it can be concluded that all independent variables (X1, X2, and X3) have a significant effect on Student

Satisfaction (Y) because all P-values are <0.05 and the T-statistic is >1.96. The following is an explanation of each relationship:

- Digitalization of Services (X1) has a positive and significant effect on Student Satisfaction (coefficient 0.540, P = 0.000). This means that the higher the Digitalization of Services, the higher the Student Satisfaction.
- Operational Efficiency (X3) has a negative but significant effect on Student Satisfaction (coefficient -0.325, P = 0.012). This means that an increase in Operational Efficiency is correlated with a decrease in Student Satisfaction, which may indicate an indirect effect or problems in the implementation of efficiency that are less favorable to students.
- Student Satisfaction is also positively and significantly influenced by Quality of Service (X2) (coefficient 0.358, P = 0.003). This indicates that customer satisfaction increases along with the increase in student Quality of Service.

All three hypotheses in this model proved significant, but the direction of influence varied. Digitalization of Services and Quality of Service had a positive impact on Student Satisfaction, while Operational Efficiency showed a significant negative impact.

Discussion

Digitalization of Services (X1) on Student Satisfaction (Y)

Digitalization of Services has been shown to have a significant and positive impact on student happiness, as evidenced by its coefficient of 0.540 and P-value of 0.000. This indicates that student happiness increases along with the level of Digitalization of Services at UINSU. These results are in line with the literature's statement that advances in information technology, such as the implementation of an integrated student email information system (SISELMA) and an integrated portal, can improve the efficiency, transparency, and accessibility of campus services. Ease of access to information, course registration, online grade monitoring, and efficient management of student and lecturer data through digital platforms contribute directly to positive student experiences. Students agree that fast and simple administrative processes are more beneficial, even remotely, which ultimately increases their satisfaction with campus facilities.

Quality of Service (X2) on Student Satisfaction (Y)

Furthermore, with a coefficient of 0.358 and a P-value of 0.003, Quality of Service shows a positive and significant influence on Student Satisfaction. This indicates that improving the Quality of Service offered by UINSU will certainly result in a higher level of Student Satisfaction. Quality of Service encompasses various aspects such as professionalism in providing services, comfortable physical conditions of facilities, the availability of supporting facilities, and the validity of the service. When students perceive that the service they receive meets or exceeds their expectations, their satisfaction will increase. This is in line with the theory of service quality which emphasizes the importance of comparing the perception of the service received with customer

expectations. UINSU's efforts to improve service quality, as seen from the results of the Student Satisfaction survey and the development of academic services, have made a positive contribution to Student Satisfaction.

Operational Efficiency (X3) on Student Satisfaction (Y)

Interestingly, Operational Efficiency showed a negative but significant effect on Student Satisfaction, with a coefficient of -0.325 and a P-value of 0.012. These results indicate that an increase in Operational Efficiency is actually correlated with a decrease in Student Satisfaction. This phenomenon may be caused by several factors. Although Operational Efficiency aims to reduce costs, increase productivity, and improve the quality of outcomes, its implementation can be less than student-centered. For example, efficiency efforts that focus too much on resource reduction or automation without considering the humanistic aspects or specific student needs can lead to dissatisfaction. Obstacles such as a lack of effective campus operational management, limited facilities, or difficulty accessing supposedly efficient digital services can contribute to decreased satisfaction. Previous research on Operational Efficiency often focuses on companies or hospitals, where efficiency directly impacts profits or patient care. However, in the campus context, efficiency must be balanced with comfort and convenience for students. Therefore, it is important for UINSU to reevaluate how Operational Efficiency is implemented to avoid compromising the student experience and satisfaction.

CONCLUSION

Based on a comprehensive analysis of the influence of Digitalization of Services, Quality of Service, and Operational Efficiency on Student Satisfaction in the use of UINSU campus facilities, although the direction of the influence differed, this study found that all three independent variables had a significant impact on student satisfaction. Quality of Service and digitalization were shown to have a positive and significant impact on student satisfaction. This means that the more effectively technology is integrated into campus services and the higher the quality of service offered, the higher student satisfaction.

This aligns with expectations that easy access to information, speed of administrative processes, quality interactions with staff, and adequate physical facilities will contribute to a positive student experience. However, an interesting and crucial finding from this study is that Operational Efficiency showed a significant negative impact on student satisfaction. This suggests a potential dissonance between efforts to improve campus operational efficiency and student perceptions and experiences.

Although Operational Efficiency aims to optimize resources and processes, this negative result may reflect that the implementation of these efficiencies has not fully aligned with student needs or convenience, or may even create new obstacles that reduce student satisfaction. For example, excessive efficiency without considering humanistic aspects or flexibility can lead to students feeling underserved or facing rigid bureaucracy.

Methodologically, a questionnaire was administered to 100 UINSU

students from various faculties as part of this associative quantitative study; the majority of respondents were between 20 and 23 years old. With all indicators having outer loading values above 0.70 and Average Variance Extracted (AVE) values above 0.50, the measurement model (Outer Model) test demonstrated strong convergent validity (the highest for Student Satisfaction at 0.853 and the lowest for Operational Efficiency at 0.726), confirming that the research instrument was valid and capable of representing the constructs being measured. Discriminant validity was also met, ensuring that each latent variable was unique and did not overlap. In addition, the reliability test showed high internal consistency with Cronbach's Alpha, Composite Reliability (rho_a), and Composite Reliability (rho_c) values greater than 0.70 for each variable, indicating the validity and dependability of this research tool. This conclusion was further strengthened by testing the structural model (Inner Model). The R-squared value of the Student Happiness variable (Y) was 0.389, or 38.9%, meaning that Operational Efficiency, Quality of Service, and digitalization together could explain almost 40% of the variation or change in student happiness. Other factors outside this research model likely impacted the remaining 61.1%. The Path Coefficient hypothesis test findings clearly indicate that while Operational Efficiency (coefficient -0.325, P = 0.012) has a negative and significant impact on customer satisfaction, Digitalization of Services (coefficient 0.540, P = 0.000) and Quality of Service (coefficient 0.358, P = 0.003) have a positive and significant impact on student satisfaction.

Thus, this study provides important insights for UINSU to not only focus on improving digitalization and Quality of Service, but also to re-evaluate the implementation of Operational Efficiency to better align with student needs and expectations. A more comprehensive strategy is needed in campus operational management, one that balances efficiency with user satisfaction, to ensure that every improvement effort truly contributes to an optimal and positive learning experience for students.

REFERENCES

Anika, R., Siregar, W. K., Afriyanti, Y., N. (2023). Konsep dasar sistem informasi dalam perkembangan bisnis digital. *Jurnal Ekonomi Dan Bisnis Digital*, *1*(2), 190–196.

Anshar, F., Koli, G., Ibrahim, A., & Nurlina, N. (2022). Pengaruh Kualitas Layanan PT. PLN (Persero) Terhadap Kepuasan Pelanggan Menggunakan Metode Servqual. *In SISITI: Seminar Ilmiah Sistem Informasi Dan Teknologi Informasi*, *11*(1), 153–162. https://doi.org/10.36774/sisiti.v11i1.956

Assyahri, W., M. M. (2023). Pengaruh kualitas pelayanan akademik terhadap Student Satisfaction Universitas Negeri Padang. *Jurnal Manajemen Dan Ilmu Administrasi Publik (JMIAP)*, *5*(3), 239–247. https://doi.org/10.24036/jmiap.v5i3.638

Batubara, M. C., & Anggraini, T. (2022). Analisis Pengaruh Layanan Digital terhadap Minat Generasi Z dalam Menggunakan Produk Perbankan

Syariah. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, *7*(2), 706–725. https://doi.org/10.30651/jms.v7i2.14165

Darwin, S., Yohanes, D., Kunto, S., & Si, S. (2014). Analisis Pengaruh Kualitas Layanan Terhadap Loyalitas Sebagai Variabel Intervening Pada Asuransi Jiwa Manulife Indonesia ± Surabaya. *Jurnal Manajemen Pemasaran Petra*, *2*(1), 1–12.

Hasyim, Zuhra, I., Septi, A. J., & Dabutar, A. R. (2023). Pengaruh kualitas layanan BRI Mobile terhadap kepuasan nasabah (Studi pengguna BRI Mobile di fakultas ekonomi, Universitas Negeri Medan). *Jurnal Ekonomi Dan Perbankan Syariah*, *8*(4), 764–778. Retrieved from https://doi.org/10.30651/jms.v8i4.20789

Hutapea, M. H., Bi Rahmani, N. A., & Tambunan, K. (2024). Pengaruh kualitas pelayanan, persepsi harga dan cita rasa terhadap kepuasan konsumen pada Durian Kocok 77 Tempuling. *Jurnal Ilmiah Ekonomi Dan Manajemen*, *2*(5), 44–60. https://doi.org/10.61722/jiem.v2i5.1207

Mahmudah, & Rahmatika. (2021). Pengaruh Persepsi Kegunaan, Kemudahan Penggunaan, Kepercayaan, Kualitas Layanan, dan Word Of Mouth Terhadap Minat Penggunaan Mobile Banking 2020 (Studi Kasus Nasabah Bri Kc Semarang). *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, *6*(2), 419–441. Retrieved from http://103.114.35.30/index.php/Mas/article/view/6989

Mustafa Kamal Rokan, Nur Ahmadi Bi Rahmani, & Nurfatimah Munthe. (2022). Pengaruh Peran Manajer, Kualitas Pelayanan Islami Dan Kepercayaan Terhadap Loyalitas Melalui Kepuasan Pasien Bekam Sebagai Variabel Intervening Pada Mitra Sehat Thibun Nabawi Di Masa Covid-19. *Jurnal Ilmiah Ekonomi Islam* , *8*(3), 3728–3736. https://doi.org/10.29040/jiei.v8i3.6752

Nasution, Muhammad Irwan Padli,. Nurbaiti,. Nurlaila,. Tri Inda Fadhila Rahma, K. (2020). Face Recognition Login Authentication for Digital Payment Solution at COVID-19 Pandemic. *International Conference on Computer and Informatics Engineering, IC2IE*, 48–51. https://doi.org/10.1109/IC2IE50715.2020.9274654

Prameswari, A., Namira Hsb, D., Nur Bayani, L., & Nurbaiti, N. (2022). Analisis Faktor-Faktor Yang Mempengaruhi Minat Mahasiswa UINSU Medan Dalam Menggunakan Sistem Pembayaran E- Wallet. *JUSIBI (Jurnal Sistem Informasi Dan E-Bisnis)*, *4*(1), 60–70. https://doi.org/10.54650/jusibi.v4i1.421

Putri, M., Bahas, R., & Yamit, Z. (2022). Pengaruh Digitalisasi terhadap Praktik Organisasi dan Kinerja Operasi pada PT. IGP Internasional Yogyakarta. *Selekta Manajemen: Jurnal Mahasiswa Bisnis & Manajemen*, *01*(03), 16–23.

Rahmani, N. A. B. (2022). Metodologi Penelitian Kualitatif dan Kuantitatif. In *Rahmani*.

Saputra, R., Nasution, M. I. P., & Dharma, B. (2023). The Impact of Using AI Chat GPT on Marketing Effectiveness: A Case Study on Instagram Marketing. *Indonesian Journal of Economics and Management*, *3*(3), 603–

617. https://doi.org/10.35313/ijem.v3i3.4936
Tanzeh, A. (2018). *Pengantar Metode Penelitian*. Yogyakarta: Teras Publis.
Wahyuningsih, W., & Prabhata, I. (2024). Pengaruh Digitalisasi Dan Inovasi Pelayanan Website Jakevo Terhadap Kepuasan Masyarakat Di Keluarahan Cempaka Putih Barat Kota Jakarta Pusat. *Reformasi Administrasi*, *11*(2), 244–252. https://doi.org/10.31334/reformasi.v11i2.4195
Yudi Siswadi, A. S. (2022). Literature Study on Fiqh Muamalah Digital Business Transactions (e-commerce). *International Journal of Economics, Social Science, Entrepreneurship and Technology (IJESET)*, *1*(3), 220–236.