

The influence of application accessibility and service quality on customer satisfaction of the Tukufood E-Canteen

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Abstrak

Dalam dunia pendidikan, layanan e-canteen mulai dimanfaatkan untuk mendukung digitalisasi fasilitas sekolah. Penelitian ini bertujuan untuk mengetahui pengaruh kemudahan akses aplikasi dan kualitas pelayanan terhadap kepuasan pelanggan e-canteen Tukufood di SMK Negeri 1 Surakarta. Metode yang digunakan adalah kuantitatif dengan pendekatan eksplanatori, melibatkan 138 siswa sebagai sampel. Hasil penelitian menunjukkan bahwa kemudahan akses aplikasi dan kualitas pelayanan secara parsial maupun simultan berpengaruh positif dan signifikan terhadap kepuasan pelanggan. Hal tersebut dibuktikan dengan $F_{hitung} 117,499 > 3,06 F_{tabel}$ dan nilai signifikansi sebesar $0,000 < 0,05$. Temuan ini menegaskan pentingnya optimalisasi fitur aplikasi dan peningkatan layanan dalam mendukung pengalaman pengguna e-canteen.

Kata kunci: aplikasi mudah diakses; digitalisasi layanan; pengalaman pengguna; kuantitatif

Abstract

In educational settings, e-canteen services are increasingly utilized to support the digitalization of school facilities. This study examines the influence of application accessibility and service quality on customer satisfaction with the Tukufood e-canteen at SMK Negeri 1 Surakarta. Using a quantitative explanatory approach, the study involved 138 students as participants. Results indicated that both application accessibility and service quality exerted positive and significant effects on customer satisfaction, both individually and collectively. The simultaneous effect was evidenced by $F = 117.50$, $p < .001$, exceeding the critical value of $F_{crit} = 3.06$. These findings underscore the importance of optimizing application features and enhancing service delivery to support positive e-canteen user experiences.

Keywords: easy to access applications; digitalization of services; user experience; quantitative

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Introduction

Technological advancement has fundamentally transformed how individuals live, work, and interact. In educational contexts, technology plays a crucial role in enhancing efficiency and productivity (Andri et al., 2019). According to Herawati et al. (2022), technologies that enable students to access information quickly and efficiently are essential, given contemporary students' instant-paced lifestyles and high mobility. One manifestation of technology utilization in school environments is the digitalization of canteen services, known as e-canteens (Rahmawati, 2019). Such services not only represent technological progress in the education sector but also support the implementation of digital culture relevant to current generational needs.

The continuous growth in smartphone usage has driven digital application utilization across various sectors, including education. Data from the Central Bureau of Statistics indicate an increase in mobile phone ownership from 50.94% in 2013 to 67.29% in 2023 (Badan Pusat Statistik Indonesia, 2024). This trend presents opportunities for introducing application-based services in schools, such as e-canteens. According to Mufidah and Trihantoyo (2020), e-canteens are facilities that enable students and school community members to fulfill food and beverage needs through electronic systems, similar to online food ordering services like GoFood and GrabFood. This exposure familiarizes students with practical and efficient digital systems.

E-canteens offer solutions to problems commonly encountered in conventional canteens, such as long queues, order errors, and payment mistakes (Nugroho et al., 2019). However, these services also present potential drawbacks, including misuse during class hours, increased covert consumption, and impacts on students' learning focus (Mufidah & Trihantoyo, 2020). Therefore, school oversight is essential to ensure e-canteen usage does not disrupt teaching and learning processes. Such oversight can be implemented through policies, access time regulation, and collaboration among teachers, students, and canteen management.

SMK Negeri 1 Surakarta is one school that has adopted e-canteen services through the Tukufood application, developed from Tukuyo.id. However, preliminary surveys indicate that most students still prefer conventional canteens due to access constraints, limited ordering time windows, and service quality issues. Consequently, evaluating application accessibility and service quality aspects is crucial for enhancing e-canteen customer satisfaction in schools.

In business contexts, customer satisfaction plays a vital role and serves as a cornerstone for organizational success (Herawati et al., 2022). When producers or companies deliver products and services that meet consumer needs and desires, customer satisfaction results. According to Mwiya et al. (2022), customer satisfaction is a feeling associated with outcomes that meet or exceed expectations. Customer satisfaction can be defined as the result of comparing customer expectations with the performance of received products or services. Customer satisfaction emerges from several important factors. Factors influencing customer satisfaction include product quality, service quality, emotional aspects, price, and costs (Puspitasari & Astuti, 2019). These factors must be considered by product or service providers. Customer satisfaction indicators in this study include quality products, effective complaint handling systems, satisfactory service delivery, promotional offerings to please customers, and ease of product access (Adhari, 2021).

Application accessibility is defined as the ease users experience when employing applications or systems. According to Nugroho and Laily (2022), application accessibility represents a perception of how easy it is to operate the application. Meanwhile, Setyani et al. (2024) define accessibility as ease of use, encompassing clarity of user experience, simplicity in operating the application, and problem-solving features. Davis et al. (2020) assert that ease of use is determined by user perceptions of effort required to operate technology or systems. Based on these definitions, application accessibility in this study refers to students' perceived ease when

using the Tukufood e-canteen application, including interface clarity, navigation simplicity, and operational efficiency. Application accessibility indicators in this study comprise user-friendly interfaces, simple system usage, clear application language, clear instructions, and availability of access channels (Susanti & Putra, 2023).

Service quality constitutes a critical aspect determining organizational success or failure in satisfying customers. According to Agustina and Sapitri (2022), service quality represents the difference between customer expectations and perceptions of received services. When provided services meet or exceed expectations, service quality is considered good; conversely, when services fall short of expectations, quality is deemed poor. Samirudin (2023) emphasizes that service quality is intangible, complex, and difficult to measure because it depends on customer perceptions and experiences. Quality assessment involves comparing customer expectations with actual service performance. Based on these perspectives, service quality in this study refers to students' perceptions of Tukufood e-canteen services, including responsiveness, accuracy, and friendliness of service providers. Service quality indicators in this study include reliability, physical facilities, empathy, responsiveness, and assurance (Winata & Anugrah, 2023).

Puryanto (2021) investigated the influence of price, service quality, and product quality on customer satisfaction in Shopee e-commerce. Results indicated that price, service quality, and product quality significantly influenced customer satisfaction. This research demonstrates that service quality is crucial for enhancing customer satisfaction. Irfansyah et al. (2022) examined the influence of service quality and application usability on customer satisfaction among Maxim users in Bandar Lampung. Results showed that service quality and application usability significantly influenced customer satisfaction. This finding reveals that service quality and ease of use serve as important foundations for satisfaction in digital transportation services.

Based on the background above, this study aims to determine: (1) whether application accessibility influences customer satisfaction with the Tukufood e-canteen among Grade X and XI MPLB students at SMK Negeri 1 Surakarta, (2) whether service quality influences customer satisfaction with the Tukufood e-canteen among Grade X and XI MPLB students at SMK Negeri 1 Surakarta, and (3) whether application accessibility and service quality simultaneously influence customer satisfaction with the Tukufood e-canteen among Grade X and XI MPLB students at SMK Negeri 1 Surakarta.

Research Method

This research was conducted with Grade X and XI students majoring in Office Management and Business Services (MPLB) at SMK Negeri 1 Surakarta. The independent variables in this study were Application Accessibility (X_1) and Service Quality (X_2), while the dependent variable was Customer Satisfaction (Y). The research method employed was quantitative with an explanatory approach. The quantitative method was used to examine a specific population or sample, with data collected through research instruments and analysis results presented as statistical data or numbers, aiming to test previously formulated hypotheses. The population for this study comprised all Grade X and XI students from the Office Management and Business Services (MPLB) major. Population selection was based on students from SMK Negeri 1 Surakarta who had used the Tukufood e-canteen.

Sampling employed proportional random sampling technique, with sample size calculated using the Slovin formula, resulting in 138 respondents from a total population of 211. The sample proportion distribution consisted of 69 samples from Grade X MPLB (from a population of 106 students) and 69 samples from Grade XI MPLB (from a population of 105 students). Data collection utilized questionnaires with a modified Likert scale. The use of a modified Likert scale in this questionnaire was highly appropriate because the variables studied were subjective and psychological in nature, such as perceptions of ease, quality, and satisfaction. The Likert scale enables quantitative measurement of perceptions in ordinal form. With a rating range of 1–4, this scale facilitated respondents (students) in providing responses reflecting their level of agreement/disagreement with each statement while avoiding biased responses. The instrument also

underwent validity and reliability testing, making it suitable for use as a measurement tool in quantitative research.

Research instrument validation techniques employed validity testing and reliability testing to ensure that the research instrument was appropriate for measuring the studied variables. Data analysis techniques utilized SPSS version 26 software with several steps: (1) compiling data tabulation; (2) prerequisite analysis tests consisting of normality testing using the Kolmogorov-Smirnov method, linearity testing using the ANOVA method, multicollinearity testing by examining Tolerance and VIF (Variance Inflation Factor) values, and heteroscedasticity testing using the Glejser Test; (3) hypothesis testing consisting of the t-test to determine the partial influence of X_1 and X_2 on Y , and the F-test to determine the simultaneous influence of X_1 and X_2 on Y , multiple linear regression analysis using the Multiple Linear Regression method (OLS – Ordinary Least Squares) to determine the simultaneous and partial influence of X_1 and X_2 on Y ; (4) coefficient of determination analysis to determine the magnitude of independent variable contribution to dependent variable variation; and (5) calculating the effective contribution and relative contribution of X_1 and X_2 to Y to determine the proportional contribution of each independent variable to customer satisfaction.

Results and Discussion

Research Results

In this study, data collection was conducted using questionnaires. Before distributing questionnaires to respondents, questionnaire pilot testing was performed to determine validity and reliability. Validity test results for the customer satisfaction variable (Y) questionnaire indicated that all 14 statement items were valid. For the application accessibility variable (X_1) questionnaire, out of 15 statement items, 13 were valid and 2 were invalid. Additionally, validity test results for the service quality variable (X_2) questionnaire showed that out of 14 statement items, 13 were valid and 1 was invalid. Invalid statement items were subsequently eliminated, as they were already represented by other statement items within the same indicator. Based on reliability test results, the customer satisfaction variable (Y) yielded $0.919 > 0.60$, the application accessibility variable (X_1) yielded $0.872 > 0.60$, and the service quality variable (X_2) yielded $0.801 > 0.60$, indicating that statement items were reliable and could serve as measurement instruments. The hypothesis test results conducted using SPSS version 26 are as follows.

Table 1
t-Test Results

Model	t_{count}	Significance Value	Explanation
Application Accessibility	5,355	0,000	Linear
Service Quality	5,023	0,000	Linear

In the research process, hypothesis testing is necessary to determine whether the proposed hypothesis can be accepted or rejected. The t-test is used to determine whether there is an influence from independent variables on the dependent variable partially (individually). Data processing results in Table 1 show that the t value for the application accessibility variable was 5.355 with significance $p < .001$. Determination of t_{crit} with a significance level of $.05/2 = .025$ and $n = 138$ (the formula is $\alpha/2$; $n - k - 1$, thus $.025$; $138 - 2 - 1 = 135$) yielded $t_{\text{crit}} = 1.977$. Therefore, it can be determined that $5.355 > 1.977$, meaning H_0 is rejected and H_a is accepted. Thus, it can be concluded that there is a positive and significant influence of application accessibility on customer satisfaction. Furthermore, the t value for the service quality variable was 5.023 with significance $p < .001$. Therefore, it can be determined that $5.023 > 1.977$, meaning H_0 is rejected and H_a is accepted. Thus, the results indicate that there is a positive and significant influence of service quality on customer satisfaction.

Table 2
F-test Results

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2253,754	2	1126,877	117,499	,000 ^b
Residual	1294,717	135	9,590		
Total	3548,471	137			

The F-test in Table 2 was conducted to determine whether independent variables simultaneously influence the dependent variable. Based on the obtained results, it can be determined that the F value = 117.50 with a significance value $p < .001$ and $F_{crit} = 3.06$ (the formula for determining F_{crit} is $k : n - k$, thus $2 : 138 - 2$, $2 : 136 = 3.06$). From the presented results, it is known that F is greater than F_{crit} , meaning H_0 is rejected and H_a is accepted. Therefore, it can be concluded that collectively, application accessibility and service quality influence customer satisfaction.

This study employed multiple linear regression analysis to calculate and analyze relationships among variables. The objective was to determine whether the relationships among these variables are positive or negative, and to predict the value of the dependent variable when independent variables experience changes, whether increases or decreases. The results of the multiple linear regression analysis conducted in this study are presented in the following table.

Table 3
Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6,113	2,389		2,558	,012
Application Accessibility	,471	,088	,437	5,355	,000
Service Quality	,449	,089	,410	5,023	,000

Analysis results demonstrate that the regression model formed in this study is: $Y = 5.952 + 0.337X_1 + 0.229X_2$. This equation indicates that if application accessibility (X_1) increases by one unit and service quality (X_2) remains constant, then customer satisfaction will increase by 0.337 units. Meanwhile, if service quality (X_2) increases by one unit and application accessibility (X_1) remains constant, then customer satisfaction will increase by 0.229 units.

Table 4
Coefficient of Determination Results

R	R Square	Adjusted R Square	Std. Error of the Estimate
,797 ^a	,635	,630	3,097

Based on Table 4, results show that the coefficient of determination value is 0.635, thus it can be concluded that the influence of application accessibility and service quality on Tukufood e-canteen customer satisfaction among Grade X and XI MPLB students at SMK Negeri 1 Surakarta is 63.5%, with the remaining 36.5% influenced by other variables not examined in this study.

Table 5
Multiple Linear Regression Analysis Results and Coefficient of Determination Results

Variable	Regression Coefficient (Beta)	Correlation Coefficient	R Square
X_1	0,437	0,753	63,5
X_2	0,410	0,747	63,5

Effective contribution is a measure of the pure contribution provided by each independent variable to the dependent variable. Based on the data presented in the table above, for the application accessibility variable, the value is $0.437 \times 0.753 = 0.329$, yielding a percentage value of 32.9%. For the service quality variable, the value is $0.410 \times 0.747 = 0.306$, yielding a percentage value of 30.6%.

Relative contribution is used to determine the percentage of each independent variable to the dependent variable collectively, forming a 100% value. Calculation of the relative contribution for the application accessibility variable to customer satisfaction is $32.9 : 63.5 = 0.518$, yielding a percentage value of 51.8%. For the service quality variable to customer satisfaction, the calculation is $30.6 : 63.5 = 0.482$, yielding a percentage value of 48.2%.

Discussion

Calculation results from the t-test in this study demonstrate that $t > t_{crit}$ ($5.355 > 1.977$) with a significance value $p < .001$, thus explaining that application accessibility positively and significantly influences customer satisfaction. Based on data processing conducted, it can be determined that the higher the level of application accessibility, the higher the Tukufood e-canteen customer satisfaction. This aligns with research by Setyani et al. (2024), which explains that application accessibility significantly influences customer satisfaction, ultimately also increasing customer loyalty. Previously, research conducted by Irfansyah et al. (2022) elaborated that application accessibility positively and significantly influences customer satisfaction. If customers find an application easy to use and requiring minimal effort, this can influence increasingly higher customer satisfaction. With easy and flexible access, customers will feel more comfortable and loyal in using digital services, including in the e-canteen context such as Tukufood.

Based on data collection results, the statement with the lowest value was "Orders at the Tukufood e-canteen can be easily monitored due to good internet facility availability at school." This indicates that some students perceive school internet facilities as still not optimal when needed for placing orders at the Tukufood e-canteen. The second-lowest value for the application accessibility variable was found in the statement "The Tukufood e-canteen is responsive and does not experience lag or force close when used." This indicates that Grade X and XI MPLB students at SMK Negeri 1 Surakarta perceive that application accessibility at the Tukufood e-canteen is still not responsive and possibly experiences lag or force close when used. The existence of problems when accessing the Tukufood e-canteen can reduce comfort and even reduce student interest in placing orders. Therefore, Safitri and Dewi (2025) stated that good application accessibility with high flexibility can be considered a key factor influencing customer satisfaction.

Statistical testing results regarding the influence of service quality on customer satisfaction show that $t > t_{crit}$ ($5.023 > 1.977$) with a significance value $p < .001$. These results can be concluded to indicate that the service quality variable positively and significantly influences customer satisfaction. Service quality plays an important role in increasing customer satisfaction. This aligns with previous research by Winata and Anugrah (2023), which elaborated that service quality has a positive and significant influence on customer satisfaction. Additionally, research conducted by Puryanto (2021) found that service quality positively and significantly influences customer satisfaction. This corresponds with the results of this study, which reveal that service quality has an effective contribution of 30.6% and a relative contribution of 48.2%. This means service quality influences Tukufood e-canteen customer satisfaction.

These findings confirm that service quality is a key factor in creating positive experiences for Tukufood e-canteen customers. Responsive, friendly service capable of consistently meeting customer needs and expectations will drive the creation of higher satisfaction. In the context of digital services such as e-canteens, service quality not only encompasses direct interaction but also concerns application ease of use, service speed, menu information clarity, and order processing accuracy. When customers feel that the provided service aligns with or even exceeds expectations, this will impact increased satisfaction and the likelihood that customers will recommend the service to others. Based on data collection results, the lowest item was found in the statement "I feel payment method options at the Tukufood e-canteen are diverse and quite complete." This

indicates that service quality in terms of transaction service diversity is still lacking. This condition can create difficulties for users with particular payment method preferences, especially in the digital era that demands flexibility and transaction ease. Therefore, Tukufood e-canteen management needs to consider adding more digital payment options such as e-wallets, QRIS, or bank transfers to enhance user comfort and satisfaction. Additionally, adding payment method variations that meet user preferences is also expected to increase customer satisfaction.

Results from this study show that $F > F_{crit}$ ($117.50 > 3.06$) and a significance value $p < .001$. Based on these F-test results, it can be interpreted that application accessibility and service quality simultaneously have a significant influence on Tukufood e-canteen customer satisfaction among Grade X and XI MPLB students at SMK Negeri 1 Surakarta. This research is also supported by research from Firdaus and Himawati (2022), which states that service quality and application accessibility collectively substantially influence customer satisfaction. Subsequently, research conducted by Aditya and Damayanti (2024) shows results that the ease-of-use variable referring to application accessibility and the service quality variable positively influence customer satisfaction. Thus, optimal accessibility and good service quality complement each other in creating satisfying user experiences and can increase customer satisfaction. Based on coefficient of determination calculations, the application accessibility variable provides a contribution of 32.9%, while the service quality variable provides a contribution of 30.6%, with effective contribution from both variables reaching 63.5%. Furthermore, in terms of relative contribution, application accessibility contributes 51.8%, while service quality contributes 48.2%. Therefore, these results show that the application accessibility variable has a greater influence compared to the service quality variable. Optimal application accessibility will increasingly enhance Tukufood e-canteen customer satisfaction.

In the context of the Tukufood e-canteen, synergy between user-friendly application displays, intuitive navigation, and fast, responsive service becomes an important element in shaping positive user perceptions. When customers experience ease in placing orders, receive clear information, and are well served, satisfaction will naturally form. Consequently, an integrated approach between technical aspects (application ease of use) and humanistic aspects (service quality) is very important to maintain and enhance to ensure sustainable customer satisfaction.

Conclusion

Based on data processing results in research regarding the influence of application accessibility and service quality on customer satisfaction, it can be concluded that application accessibility positively and significantly influences customer satisfaction, and service quality positively and significantly influences customer satisfaction. Furthermore, results show that application accessibility is the variable that has a greater influence on e-canteen customer satisfaction; thus, application accessibility plays an important role in shaping positive customer experiences that ultimately can increase customer satisfaction. The final finding indicates that application accessibility and service quality collectively have a positive and significant influence on Tukufood e-canteen customer satisfaction among Grade X and XI MPLB students at SMK Negeri 1 Surakarta. Recommendations that can be provided for SMK Negeri 1 Surakarta to enhance Tukufood e-canteen customer satisfaction are: school principals need to improve internet network quality and stability. Meanwhile, Tukufood e-canteen operators or management are expected to enhance application accessibility to be more responsive and, if possible, provide various non-cash payment methods to increase customer satisfaction. This research was conducted only among Grade X and XI MPLB students at SMK Negeri 1 Surakarta; therefore, results may not be generalizable to broader populations or other schools with different characteristics. Future research is expected not only to measure the influence of application accessibility and service quality on customer satisfaction but also to consider other factors that may influence customer satisfaction, such as price, product variety, or prior usage experience.

References

- Aditya, R., & Damayanti, R. W. (2024). Pengaruh kualitas pelayanan, promosi, dan kemudahan penggunaan terhadap kepuasan konsumen pada aplikasi Access By KAI (pada Daerah Istimewa Yogyakarta). *Jurnal Ekonomi Manajemen Dan Bisnis (JEMB)*, 2(1), 344–357. <https://doi.org/10.62017/jemb.v2i1.2165>
- Adhari, I. Z. (2021). *Kepuasan pelanggan & pencapaian brand trust* (Vol. 1). CV. Penerbit Qiara Media.
- Agustina, R. H., & Sapitri, R. A. (2022). Proses pemasaran jasa pendidikan dan perilaku konsumen. *YUME: Journal of Management*, 5(3).
- Andri, Robin, & Ridho, M. (2019). Pengembangan aplikasi e-kantin berbasis mobile dan web. *Jurnal Mahajana Informasi*, 4(2), 43–49. <https://doi.org/10.51544/jurnalmi.v4i2.962>
- Badan Pusat Statistik Indonesia. (2024, August 30). *Statistik telekomunikasi Indonesia 2023*. <https://www.bps.go.id/id/publication/2024/08/30/f4b846f397ea452bdc2178b3/statistik-telekomunikasi-indonesia-2023.html>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (2020). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1002.
- Firdaus, M. F., & Himawati, D. (2022). Pengaruh persepsi harga, persepsi kualitas layanan dan persepsi kemudahan penggunaan terhadap kepuasan konsumen e-commerce Shopee di Kota Depok. *Jurnal Ilmiah Ekonomi Bisnis*, 27(2), 216–230. <https://doi.org/10.35760/eb.2022.v27i2.5259>
- Herawati, S., Saktiendi, E., & Raihanah, A. (2022). Analisis pengaruh kualitas pelayanan, promosi, dan kemudahan penggunaan aplikasi KAI Access terhadap kepuasan konsumen PT Kereta Api Indonesia (Persero). *Formosa Journal of Multidisciplinary Research*, 1(6), 1391–1406. <https://doi.org/10.55927/fjmr.v1i6.1436>
- Irfansyah, A., Azzahra, A., Agusanti, A., & Sanjaya, V. F. (2022). Pengaruh kualitas layanan, dan kemudahan penggunaan aplikasi terhadap kepuasan pelanggan (studi kasus pengguna Maxim kota Bandar Lampung). *Journal for Management Student (JFMS)*, 2(4), 7–10. <https://journal.unsika.ac.id/index.php/jfms/article/download/10534/4485/31546>
- Mufidah, E. A., & Trihantoyo, S. (2020). Efektivitas layanan khusus kantin digital (e-canteen) dalam meningkatkan digital quotient siswa. *Jurnal Inspirasi Manajemen Pendidikan*, 8(4), 517–531.
- Mwiya, B., Katai, M., Bwalya, J., Kayekesi, M., Kaonga, S., Kasanda, E., ... Mwenya, D. (2022). Examining the effects of electronic service quality on online banking customer satisfaction: Evidence from Zambia. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2143017>
- Nugroho, A. C., Putra, G. R., & Fitriati, D. (2019). Implementasi e-kantin di Fakultas Teknik Universitas Pancasila. *Seminar Nasional Teknologi Informasi*, 2, 301–306.
- Nugroho, I. A., & Laily, N. (2022). Pengaruh promosi dan kemudahan akses terhadap keputusan pembelian e-commerce Shopee dengan minat beli sebagai variabel intervening (studi pada mahasiswa STIESIA Surabaya). *Jurnal Ilmu Dan Riset Manajemen*, 11(7), 1–17. <https://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/4727>
- Puspitasari, S. W., & Astuti, S. R. T. (2019). Analisis faktor-faktor yang mempengaruhi customer loyalty melalui customer satisfaction (studi pada pelanggan indihome di kota semarang). *Diponegoro Journal of Management*, 165–179.
- Puryanto, B. S. D. (2021). *Pengaruh harga, kualitas pelayanan dan kualitas produk terhadap kepuasan pelanggan di e-commerce Shopee* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Rahmawati, Y. M. (2019, October 31). *E-kantin generasi milenial kantinnya digital*. Kompasiana. <https://www.kompasiana.com/yuntafiani/5dba9e95097f360acb6cda72/e-kantin-generasi-milenial-kantinnya-digital>
- Samirudin. (2023). *Manajemen pemasaran dan nilai pelanggan*. PT Nas Media Indonesia.
- Setyani, I., Farida, U., & Rapini, T. (2024). Pengaruh kemudahan akses dan manfaat aplikasi terhadap loyalitas melalui kepuasan nasabah sebagai variabel intervening dalam

- menggunakan aplikasi mobile banking BRI di Ponorogo. *Innovative: Journal Of Social Science Research*, 4(4), 3581–3600. <https://doi.org/10.31004/innovative.v4i4.13453>
- Susanti, N. L. P. R., & Putra, I. M. P. D. (2023). Pengaruh persepsi kemudahan, kualitas layanan, dan risiko keamanan terhadap keputusan penggunaan e-wallet dalam transaksi keuangan. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 12(3), 407. <https://doi.org/10.24843/EEB.2023.v12.i03.p05>
- Winata, D. P., & Anugrah, A. K. (2023). Pengaruh kualitas pelayanan terhadap kepuasan pelanggan pada bisnis ritel Erablue di Tangerang. *Jurnal Riset Dan Publikasi Ilmu Ekonomi*, 1(6), 126–136. <https://doi.org/10.61132/menawan.v1i6.7>