RISK : Jurnal Riset Bisnis dan Ekonomi
Vol. 07, No. 01, Tahun 2026
available online at https://ojs.unik-kediri.ac.id/index.php/risk
ISSN (Online) 2722 – 3361; (Print) 2722 – 3108

Building Satisfaction Through Trust: How Brand Image and Service Quality Shape Student Experience in Smart Gate Technology

Iva khoiril mala*[1],Yunus Handoko[2], Christea Frisdiantara[3]
[1,2,3] Institut Teknologi & Bisnis Asia Malang
Email:ivamala180496@gmail.com[1],yunushandoko@gmail.com[2],christeaf@gmail.com[3]
***Korespondensi Penulis** ivamala180496@gmail.com

Received: 15 Februari 2026 *Revised: 15 Maret 2026* *Accepted:01 Mei 2026*

***Abstract**: This study examines the influence of Brand Image and Service Quality on Satisfaction Mediated by Trust (Student Smart Gate User Study). A quantitative method with the Structural Equation Modeling (SEM) approach using SmartPLS was applied to test the proposed hypothesis. The sample in this study consisted of 388 students obtained through purposive sampling. The results showed that brand image had a significant effect on satisfaction, while Servqual had no significant effect on satisfaction. Brand image was found to have an effect on trust, and the direct effect of Servqual on trust was significant. Trust was found to have a direct effect on satisfaction. In addition, trust was a full mediator in the relationship between brand image and satisfaction, and a partial mediator in the relationship between Servqual and satisfaction. The practical implications of this study are for Malang State University in managing Smart Gate including strengthening brand image through consistent communication to increase satisfaction and trust. Improving service quality is focused on system reliability and data security to build trust as a key determinant, thereby supporting operational efficiency and optimal student experience.*

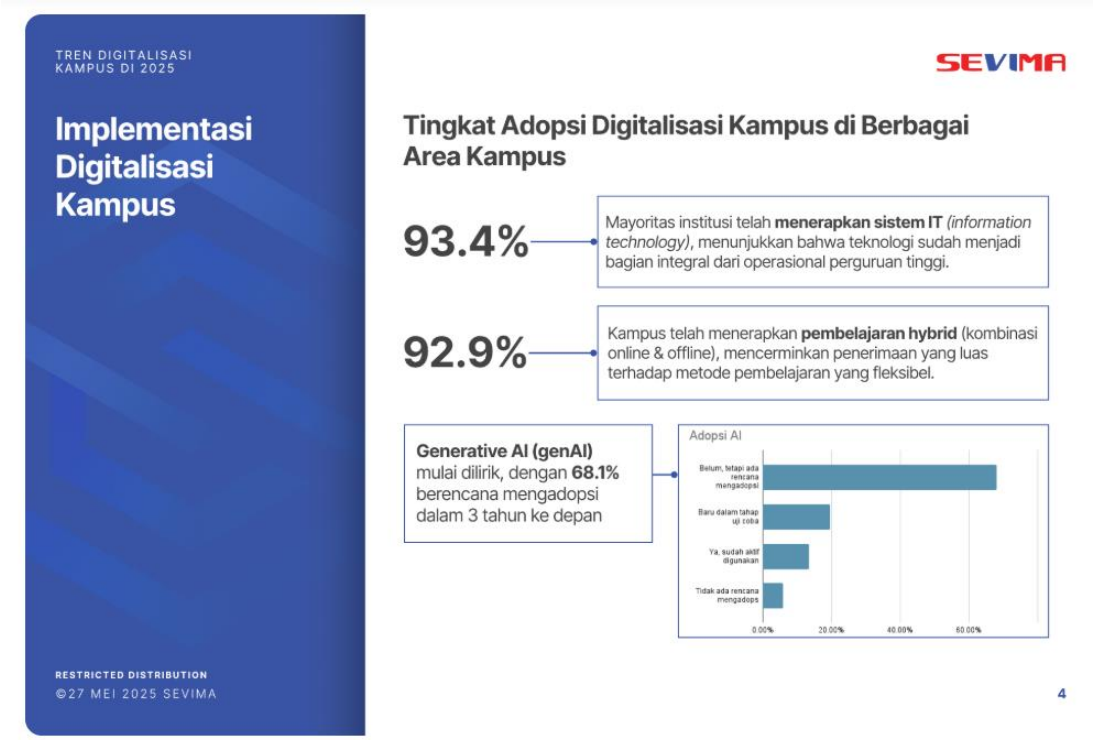
***Keywords:** Brand Image, Service Quality, Satisfaction, Trust, Smart gate*

INTRODUCTION

Significant changes have been brought about by the advancement of digital technology in a number of fields, including higher education. Higher education has seen significant changes as a result of the advent of digital technology in the era of Industry 4.0, which is characterised by the growing use of automation-based systems and digitalisation. In addition to speeding up administrative procedures, digitalisation of services increases productivity, security, and customer satisfaction(Tarafdar, 2024).

Additionally, recent studies demonstrate that process automation can improve an institution's reputation, boost trust, and offer a more reliable user experience when creating digital services (Monfort, 2025; Osman, 2024). Therefore, in order to meet global satisfaction challenges and boost institutional competitiveness in the current era, higher education

institutions must strategically implement and reconstruct digitalization through service process automation. Figure 1 displays the following data regarding the evolution of campus digitisation.



Picture 1. Campus Digitalization Adoption Rate

Source: Sevia.com

Malang State University (UM) is one of the universities striving to adapt to Smart Campus by introducing Smart Gate as a digital access and security system. This Smart Gate is expected to improve the effectiveness, efficiency, and security of academic community mobility. This automated sensor-based system simplifies the process of entering and exiting campus using identity cards or digital applications, thus supporting the creation of a modern, safe, and technology-friendly campus environment.

In this regard, one of the most important measures of the effectiveness of digital services is customer satisfaction. According to Oliver, (1997), contentment is a post-consumption assessment that establishes the perceived worth of a service. Student satisfaction is therefore a key indicator of the system's successful deployment in digital services like Malang State University's Smart Gate. Important factors that affect how satisfied students are as users include access speed, few sensor errors, and guaranteed security. Campus digital service satisfaction is significantly influenced by brand image, both at the institutional and system or service levels (e.g.,

Smart Gate). Malang State University's Smart Gate is not seen as a stand-alone system; Rather, it is a representation of the university's standing as a state-of-the-art, security-aware institution. Students utilize the institution's image as a starting point to set expectations before actually using the service.

When analyzing the Smart Gate brand image using three primary indications, issues occur. The first is the degree to which Smart Gate is intimately linked to Malang State University's ideals as an excellent, secure, and forward-thinking institution. The second factor is the brand's favorability, which indicates how favorably customers view Smart Gate. Students believe that Smart Gate is a "good intentions" innovation that improves campus security. Third, the distinctiveness of brand association, or the distinctiveness of Smart Gate as a component of Malang State University's identity. Particularly in the application of technology-based security solutions, Smart Gate is thought to set Malang State University apart from other campuses.

Aside from looks, another factor that affects the real user experience is service quality. The SERVQUAL theory highlights five key dimensions: tangibles, assurance, responsiveness, empathy, and reliability (Parasuraman, A., Zeithaml, V. A., & Berry, 1988). E-service quality indicators, which prioritize system security, reaction time, and dependability, must be used to measure service quality in a digital setting. Reliability refers to the correctness and consistency of service functions, responsiveness to the speed at which the system responds to users, and security to the protection of personal data and strict access control. The relationship between institutional image and service quality is significantly mediated by trust(McKnight, D. H., Choudhury, V., & Kacmar, 2002). McKnight, D. H., Choudhury, V., & Kacmar, (2002) describe trust in digital services as the user's perception of the system's dependability, consistency, and safety.

Despite the rapid adoption of digital services, initial field observations at Malang State University indicate several practical challenges regarding the Smart Gate system, such as occasional sensor reading failures, delays during peak mobility hours, and underlying student skepticism regarding personal data security. These issues highlight a critical problem: the provision of sophisticated hardware does not automatically guarantee user satisfaction. While previous studies have extensively explored digitalization in higher education, most have focused on e-learning platforms or administrative software (Tarafdar, 2024; Osman, 2024). There is a significant research gap concerning the user experience of AI-driven physical security infrastructure, such as automated campus gates. Therefore, the novelty of this study lies in addressing this gap by integrating Expectation-Confirmation Theory (ECT) and Social Exchange Theory (SET) to investigate how institutional Brand Image and technical Service Quality shape user Satisfaction. Crucially, this study positions Trust as a vital psychological mediator, arguing

that objective technological quality must be converted into subjective trust before true satisfaction can be achieved in automated security environments.

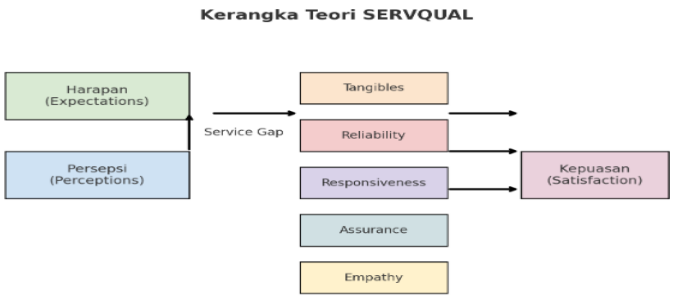
LITERATURE REVIEW

Expectation Comfirmation Theory (ECT)

Oliver, (1997) created this idea as a framework to describe how a customer's pleasure is shaped after using a good or service. A user's initial expectations of the performance of a product or service (expectation), the actual performance experienced (performance), the process of comparing expectations and performance that leads to confirmation or disconfirmation (confirmation/disconfirmation), and the final evaluation in the form of satisfaction (satisfaction) comprise the four main components of Expectation Confirmation Theory (ECT). Confirmation happens when real performance matches or surpasses expectations, which usually leads to satisfaction; disconfirmation and possible dissatisfaction occur when actual performance falls short of expectations (Oliver, 1980, 1997).

SERVQUAL* and *E-SERVQUAL

SERVQUAL was created by Parasuraman, Zeithaml, and Berry (1988) and has five dimensions: tangibles, assurance, responsiveness, empathy, and reliability. This methodology was extended to E-SERVQUAL in the context of digital services, which emphasises system dependability, security, and responsiveness more. Since Smart Gate is an automation-based digital service that significantly depends on system security and consistency, this adaption is crucial.



Picture 3. Framework of the ServQual Theory (Parasuraman, Zeithaml, and Berry, 1988)

Brand Image

Consumers' recollections of a brand are shaped by a variety of connections and experiences, according to Kotler, P., & Armstrong, (2018). This implies that opinions about a brand are influenced by both real-world experiences that align with the company's promise and marketing communications. According to Kotler and Armstrong (2018), a brand is more than just a name or symbol; it is a representation of the identity, meaning, and promise that a product or service offers to its customers. Visual components that set a brand apart from rivals, such as a name, logo, colour, or unique design, can be used to identify it (Foroudi, 2019).

Service Quality

One of the most well-known conceptual models for assessing service quality from the viewpoint of the user is SERVQUAL, which was created by Parasuraman, Zeithaml, and Berry (1985; 1988). This paradigm is predicated on the idea that service quality is determined by contrasting perceived performance with user expectations. Users view a service as high quality when actual experiences meet or surpass their expectations; on the other hand, they view a service as unsatisfactory when perceived performance falls short of expectations. The SERVQUAL model is based on Oliver's (1980) disconfirmation paradigm theory, which states that the contrast between expected and actual results affects satisfaction and perceived quality.

Trust

According to Morgan and Hunt (1994), trust in relationship marketing refers to a customer’s belief in the reliability, integrity, and dependability of a business partner. Trust develops not only through explicit promises and formal commitments but also through consistent interactions that foster perceptions of credibility and stability over time. It represents a positive expectation regarding another party’s future behavior, grounded in reputation, prior experience, and demonstrated performance. When organizations consistently deliver reliable services and fulfill obligations, customers are more likely to perceive them as trustworthy, thereby strengthening long-term relational exchanges and enhancing mutual commitment in marketing relationships.

Satisfaction

According to Oliver (1997), satisfaction is the emotional assessment outcome when a user's expectations are fulfilled or even surpassed. In both business and educational settings, user satisfaction is one of the most crucial metrics for evaluating a service's effectiveness. The favourable emotions that result from comparing expectations and actual experiences with relation to the service obtained are referred to as satisfaction. According to Kotler and Keller (2016), a person's degree of pleasure is determined by how well a product or service performs in comparison to their prior expectations.

Hypothesis Development

An institution's brand image is an intangible asset that is vital in determining how users view it. A positive university image in the context of higher education reflects both academic reputation and the caliber of services that students and the academic community directly experience. This association has been confirmed by earlier studies. Schlesinger et al, (2021) demonstrated that, especially among German university graduates, brand image has a major impact on student satisfaction and even boosts positive word-of-mouth.

H1: Brand image (X1) has a direct influence on the satisfaction (Y) of Smart Gate users of students at Malang State University.

It has long been known that a major determinant of satisfaction is service quality. Five primary aspects are used to quantify service quality according to the SERVQUAL perspective (Parasuraman, Zeithaml, & Berry, 1988): tangibles, assurance, responsiveness, empathy, and reliability. Studies have verified that satisfaction and service quality are positively correlated. According to Teeroovengadum et al, (2019), the two most important elements in raising student satisfaction in Mauritius were responsiveness and dependability.

H_2: Service Quality (X2) has a direct influence on the satisfaction (Y) of Smart Gate users of students at Malang State University.

Keller, (1993) asserts that consumer impressions of a brand's qualities, advantages, and ideals establish its image. Positive perceptions of an organization encourage trust that the services offered are dependable, secure, and consistent. This is consistent with the Resource-Based View (RBV) (Barney, 1991), which holds that user trust is one way that brand image, as an intangible asset, can increase competitive advantage.

H_3: Brand Image (X1) has a direct influence on the trust (Z) of Smart Gate users of students at Malang State University.

According to the SERVQUAL theory (Parasuraman, Zeithaml, & Berry, 1988), tangibles, assurance, responsiveness, empathy, and dependability are all signs of high-quality service. This is consistent with Trust Theory, which highlights that pleasant experiences and the belief that the service provider will act in the user's best interests are the foundations of trust.

H_4: Service Quality (X2) has a direct influence on the trust (Z) of Smart Gate users of students at Malang State University.

The Theory of Planned Behaviour Ajzen, (1991) states that trust is the basis for beliefs that affect attitudes, intentions, and service evaluations. Customers will be happier with a service when they think the provider is trustworthy, honest, and dedicated to security. According to Davis, having faith in digital services not only lowers perceived danger but also boosts psychological comfort, which eventually results in satisfaction.

H_5: Trust (Z) has a direct influence on the satisfaction (Y) of Smart Gate users of students at Malang State University.

Although there isn't always a direct correlation between brand image and satisfaction, trust can help to strengthen it. According to Keller (1993), a positive brand image conveys to consumers trustworthiness, dependability, and a positive reputation. But before customers are satisfied, they first gain faith that the organization is reliable and genuinely dedicated to providing the services it claims to provide. This is consistent with Signalling Theory, which states that a brand's image acts as a quality signal that is subsequently converted into trust and, finally, affects satisfaction.

H_6: Brand image (X1) has a direct influence on satisfaction (Y) mediated by trust (Z) of Smart Gate users of students at Malang State University.

Service quality frequently acts as a mediating element through trust in addition to directly influencing satisfaction. The SERVQUAL framework (Parasuraman, Zeithaml, & Berry, 1988) states that users assess services on the basis of tangibles, certainty, responsiveness, empathy, and dependability. However, people must first think that the service can be depended upon constantly in order to be satisfied. In other words, contentment is ultimately driven by trust, which is fostered by high-quality services Davis

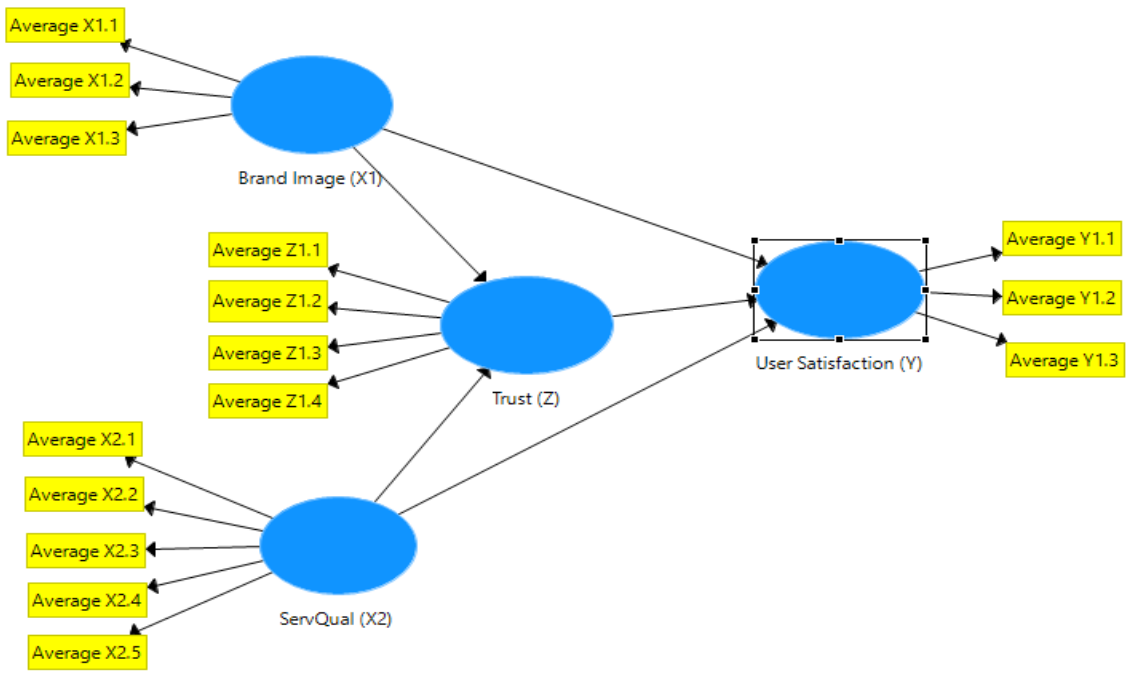
H_7: Service Quality (X2) has a direct influence on satisfaction (Y) mediated by trust (Z) of Smart Gate Student users at Malang State University.

Theoretical Synthesis and Conceptual Framework

Rather than viewing Expectation Confirmation Theory (ECT), the SERVQUAL framework, and Trust Theory , this study integrates them into a cohesive conceptual model to address the specific vulnerabilities of automated security systems. According to ECT, satisfaction is the outcome of confirmed expectations. In this research context, the university's Brand Image

establishes the users' baseline psychological expectations, while Service Quality (measured via E-SERVQUAL dimensions like reliability and responsiveness) represents the actual performance encountered at the Smart Gate. However, in technology-based security systems where personal data and access rights are involved, meeting functional performance alone is insufficient. This study argues that Trust acts as the essential synthesizing mechanism. A strong institutional image and reliable service quality reduce perceived risks, thereby fostering trust. Trust, in turn, psychologically confirms the users' expectations and mitigates dissatisfaction when minor technical glitches occur. Thus, the theoretical contribution of this study lies in demonstrating that Trust is not merely an outcome, but a required transitional phase between objective service evaluation and final user satisfaction. The following is the research framework which can be seen in Figure 1 below.

Figure 1. Conceptual Framework



METHOD

This study uses a quantitative approach with an explanatory research approach aimed at explaining the causal relationship between exogenous, endogenous, and mediating variables. A descriptive approach is used to describe the state of each variable, namely Brand Image (X1), ServQual (X2), Satisfaction (Y), and Trust (Z).

The population in this study consists of active students at Malang State University who have directly used and experienced the Smart Gate system. With a total student population of 12,635 in the 2025/2026 semester, a non-probability sampling approach, specifically purposive

sampling combined with convenience sampling, was applied. This technique was chosen to accurately target accessible users who were physically present at the Smart Gate locations and had verifiable experience with the system.

To determine the sample size, this study followed guidelines Hair et al., (2013), which recommend a minimum sample size for SEM-PLS analysis. A total of 388 respondents were successfully recruited. To ensure data quality, a screening question was implemented at the beginning of the questionnaire to rigorously verify that all participants had utilized the Smart Gate before proceeding. Data were collected using a five-point Likert scale. Data analysis and hypothesis testing were conducted using variance-based Structural Equation Modeling (SEM-PLS) techniques with SmartPLS software. The analysis proceeded in two stages: evaluation of the outer model (validity and reliability) and the inner model (structural influences). The significance of direct and indirect effects was verified through a bootstrapping procedure to accurately determine the mediating role of Trust.

The analysis proceeded in two stages: evaluation of the outer model to test instrument validity and reliability, followed by evaluation of the inner model to test structural influences. The significance of direct and indirect effects was verified through a bootstrapping procedure to determine the mediating role of hedonic shopping motivation.

RESULT

The profile of respondents in a study involving 388 smart gate users at Malang State University. The majority of respondents were women (64.9%) in the young productive age range of 18–21 years (75%). In terms of user experience, the characteristics of respondents were very diverse, but this study provides representation from each faculty in the use of Smart Gate Malang State University. It tends to be dominated by students from Malang City (88.7%),

Outer Model Results

Table 1. Outer Model

Variabel	Item	Outer Loading	Average Variance Extraced (AVE)	Composite Reliability	Discriminant Validity
Brand Image (X1)	X1.1	0,886	0,791	0,919	0,889
	X1.2	0,903			
	X1.3	0,879			
ServQual (X2)	X2.1	0,772	0,685	0,915	0,827
	X2.2	0,803			
	X2.3	0,883			
	X2.4	0,879			

	X2.5	0,839			
Trust (Z)	Z.1	0,790	0,697	0,901	0,834
	Z.2	0,886			
	Z.3	0,800			
	Z.4	0,856			
Satisfaction (Y)	Y.1	0,916	0,855	0,946	0,925
	Y.2	0,936			
	Y.3	0,922			

The measurement model assessment focused on convergent validity, reliability, and discriminant validity. As presented in Table 1, all indicators for the constructs of brand image, service quality, trust, and satisfaction produced outer loading values ranging from 0.772 to 0.936, exceeding the recommended threshold of 0.70. The Average Variance Extracted (AVE) for all variables exceeded 0.50 (ranging from 0.562 to 0.855), confirming satisfactory convergent validity.

Construct reliability was determined through Composite Reliability (CR) values, which ranged between 0.901 and 0.946. These values are within the ideal range (> 0.70 and < 0.95), indicating good internal consistency without item redundancy. Furthermore, discriminant validity requirements were met, indicating that each latent variable is empirically distinct. Thus, the measurement model is valid and reliable for structural testing.

Table 2. R^2

The coefficient of determination (R^2) was assessed to examine the proportion of variance

Variabel	**R^2**	**Adjusted R^2**
Trust (Z)	0,629	0,627
Satisfaction (Y)	0,628	0,626

explained in the endogenous constructs. The results showed that the model explained 62.9% of the variance in Trust (R^2 = 0.629; R^2 yang and 62.8% of the variance in Satisfaction (R^2 = 0.628)

Table 3. F-Square.

Variabel	**BI (X1)**	**SQ (X2)**	**Trust (Z)**	**S (Y)**
Brand Image (X1)			0.138	0.117
ServQual (X2)			0.338	0.009
Trust (Z)				0.192
Satisfaction (Y)				

The effect size (f^2) was examined to assess the contribution of each exogenous construct to the endogenous variable. The results showed that brand image (BI) had an effect size of 0.138, mediated by the Trust variable on satisfaction of 0.117, and Servqual, mediated by Trust on satisfaction of 0.009. And Trust on satisfaction showed 0.192.

Table 4. Hypothesis Testing

Variable	Original sample	*t-value*	*p-values*	Description
Brand Image (X1) > Trust (Z) (H3)	0,331	6,996	0,000	Accepted
Brand Image (X1) > Satisfaction (Y) (H1)	0,326	5,775	0,000	Accepted
ServQual (X2) > Trust (Z) (H4)	0,519	10,049	0,000	Accepted
ServQual (X2) > Satisfaction (Y) (H2)	0,102	1,441	0,150	Rejected
Trust (Z) > Satisfaction (Y) (H5)	0,439	5,953	0,000	Accepted
Brand Image (X1) Trust (Z) > Satisfaction (Y) (H6)	0,145	4,940	0,000	Accepted (Partial Mediation)
ServQual (X2) > Trust (Z) Satisfaction (Y) (H7)	0,227	5,808	0,000	Accepted (Full Mediation)

Hypothesis testing was conducted using bootstrapping procedures to evaluate the significance of structural relationships. The results showed that Brand image had a significant influence on Satisfaction (β = 0.326; t = 5.775; p = 0.000) and Servqual also had a significant influence on Satisfaction (β = 0.102; t = 5.953; p = 0.000). In addition, Brand Image significantly influenced Trust (β = 0.331; t = 6.996; p = 0.000). The direct effect of Servqual on satisfaction was significant (β = 0.519; t = 10.049; p = 0.000), while the direct effect of Trust on Satisfaction was significant (β = 0.439; t = 5.953; p = 0.000). For the indirect effect, the path Brand Image → Trust → Satisfaction is significant (β = 0.145; t = 4.940; p = 0.000) and the path Servqual → Trust → Satisfaction is significant (β = 0.227; t = 5.808; p = 0.000).

DISCUSSION

According to the hypothesis, the brand image of Malang State University has a significant impact on satisfaction with a positive coefficient of 0.325, indicating that positive perceptions of the institution can increase satisfaction in the context of technology services. This is in line with brand management theory, which states that a strong brand image fosters loyalty and satisfaction through emotional attachment and determined quality (Kotler & Keller, 2016). Not only is Smart Gate a technological advancement for the campus, but it also serves as a symbol of Malang State University's commitment to safety, efficiency, and digital transformation based on smart campus. A strong institutional image can raise students' perceptions of satisfaction with campus services,

according to research by Osman et al, (2024) and Lusiana, & Wardi, (2020) which demonstrated that brand image significantly improves student satisfaction at Turkish and Padang institutions.

With a positive but negligible coefficient of 0.102, hypothesis testing revealed that H2 was rejected, suggesting that satisfaction at Malang State University's smart gate is not directly impacted by ServQual dimensions. The ServQual paradigm, which typically asserts that service quality including tangibles, responsiveness, assurance, empathy, and reliability contributes greatly to satisfaction, is in conflict with this conclusion (Parasuraman et al., 1988). The findings of this study are also consistent with earlier research, including those of Azam, (2018), who discovered that when users encounter functional barriers in educational services, the responsiveness and tangible aspects of the service do not necessarily significantly impact user satisfaction.

With a positive coefficient of 0.331, hypothesis testing revealed that H3 was accepted, indicating that student trust in Malang State University's smart gate is significantly influenced by brand image. The idea that a positive brand image fosters trust through perceived consistency and reputation is supported by this (Hart, 2018). According to field research findings, students at Malang State University have a high degree of faith in the Smart Gate, which is mostly due to the school's positive reputation as a cutting-edge, secure, and expertly run campus. These empirical findings are also in line with other research, including that of Osman et al. (2024), which discovered that students' faith in digital services can be bolstered by an educational institution's reputation.

With a positive coefficient of 0.518, the results of hypothesis testing showed that H4 was accepted, demonstrating that ServQual significantly affects students' trust in Malang State University when it comes to smart gates. This is consistent with the ServQual paradigm, which asserts that user trust can be increased by providing high-quality services, particularly in the assurance and dependability dimensions (Parasuraman et al., 1988). This is consistent with the findings of a study by Uzir et al. (2021) that demonstrates that high-quality digital services, particularly in terms of certainty and dependability, positively boost logistics service consumers' trust. Found that e-service quality has a significant influence on trust in digital educational platforms, where system security and reliability are dominant factors (Ashiq et al, 2024); (Utomo, 2025); (Saxena, et al., 2026); (Gazi et al., 2026)

According to the results of the hypothesis test, H5 was accepted, meaning that trust significantly affects satisfaction at Malang State University's Smart Gate. H5 also has a positive coefficient of 0.438. Because customers who trust a service are more likely to be satisfied with their experience, this finding lends credence to the idea that trust is a key predictor of satisfaction.

According to field observations, a large number of students stated that they had less faith in the efficiency of manual checks that relied on officers prior to the Smart Gate. According to Uzir et al. (2021), satisfaction levels were greatly raised by a feeling of security and assurance in the caliber of digital services. Gürbüz, (2023) emphasized that when users perceive digital systems as having good reliability and security, they feel more satisfied with the services they receive.

According to hypothesis testing, H6 was accepted, which means that the results showed that brand image affects satisfaction on Malang State University's smart gate through the mediation of trust. This confirms the role of trust as a mediator and its partial mediation value. This is consistent with mediation theory, which holds that the relationship between brand image and satisfaction can be strengthened by intervening variables like trust (Osman, et al,2024). The study's empirical results are consistent with Expectation Confirmation Theory (ECT), which holds that consumers' first expectations are shaped by brand image and that trust develops as a result of the initial confirmation process when the Smart Gate's operation is satisfactory. Then, trust turns into a psychological process that links original anticipations with satisfaction-based final assessments. This study's conclusions are in line with those of a number of earlier investigations. According to Del Río etl al, (2021) brand image and satisfaction with university digital services are highly mediated by trust. Trust is shaped by impressions of the institution's image, and trust in turn affects satisfaction in the education sector (Gürbüz, 2023); (Pramuditha et al., 2024); (Taufiqurokhman et al., 2024); (Kim & Yum, 2024)

Testing the hypothesis revealed that H7 was accepted, proving that trust has a complete mediation value and that ServQual affects satisfaction mediated by trust in Malang State University's smart gate. According to empirical results, respondents view Malang State University as a cutting-edge, contemporary organization dedicated to offering safe online services. Responses about the reputation of the school, the dependability of digital services, and the belief that Malang State University continues to enhance its security system all consistently reflect this assessment. These results demonstrate that, according to the ECT framework, trust strengthens the link between service performance and satisfaction, especially when it comes to campus digital services that require a feeling of dependability and security. The interaction between institutions and users as an ongoing process of value exchange is also supported by social exchange theory (SET). The results of other earlier studies also support the congruence of these research findings. According to Monfort, et al, (2025), trust plays a significant mediating role in the association between campus digital service satisfaction and institutional image. A favorable perception of an educational establishment can foster trust, which increases student satisfaction with academic

support (Gürbüz. 2023); (Monfort, M., Sanz, L., & Gómez, 2025); (Tarafdar, 2024); (Gazi et al., 2026)

CONCLUSION

Based on the results of this study, the following conclusions can be drawn: Student satisfaction at Smart Gate users at State University of Malang (Y) is significantly influenced by brand image (X1). Student satisfaction at Smart Gate users at State University of Malang (Y) is directly and negligibly influenced by service quality (X2). Student trust at Smart Gate users at State University of Malang (Z) is significantly influenced by brand image (X1). Student trust at Smart Gate users at State University of Malang (Z) is significantly influenced by service quality (X2). The influence of brand image (X1) on student satisfaction (Y) at Smart Gate users at State University of Malang is mediated by trust (Z). The influence of service quality (X2) on student satisfaction (Y) at State University of Malang using Smart Gate users is mediated by trust (Z).

Theoretically, this study extends the Expectation Confirmation Theory by demonstrating that in AI-driven campus security systems, objective service quality is rendered ineffective without the full psychological mediation of trust. Practically, these findings urge university management to pivot their focus; Rather than exclusively highlighting the technological speed or physical features of the Smart Gates, institutions must prioritize transparent communication regarding system reliability and personal data protection to foster user trust, which is the ultimate driver of satisfaction. However, a limitation of this study is its reliance on direct, on-site cross-sectional questionnaires, which may introduce situational bias depending on environmental factors or the respondent's mood at the time of data collection. Therefore, future studies are encouraged to utilize longitudinal approaches or incorporate qualitative interviews to capture a deeper and more continuous understanding of technology adoption behavior.

BIBLIOGRAPHY

Ajzen, I. (1991). *The theory of planned behavior. Organizational Behavior and Human Decision Processes,*. 50(2), 179–211.

Ashiq, R., Ali, S., & Khan, M. A. (2024). *The impact of e-service quality on e-trust and e-satisfaction in higher education digital platforms. Education and Information Technologies,*. 29(2), 181–198.

Azam, A. (2018). Service quality and student satisfaction: Evidence from Saudi Arabia. International. *Journal of Business and Social Science,* 9(1), 42–49.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management,* 17(1), 99–120.

Del Río, J. A., Gonzalez, M., & Lopez, C. (2021). *The impact of service quality on student loyalty: Mediating role of satisfaction. International Review of Management and Marketing,*. 11(1), 1–10.

Dr. Niti Saxena1, Ashwini P2, Dr. Smitha V Shenoy3, D., Kamal Gulati4, Dr. Ajay Kumar

Kunamalla5, D. K., & 6, K. (2026). Exploring the Impact of Service Quality on Online Customer Satisfaction and Loyalty: An Empirical Study. *Journal of International Commercial Law and Technology*, *7*(1). https://doi.org/10.61336/jiclt/26-01-21

Foroudi, P. (2019). Influence of brand signature, brand awareness, brand attitude, brand reputation on hotel industry's brand performance. *International Journal of Hospitality Management*, *76*(October 2017), 271–285. https://doi.org/10.1016/j.ijhm.2018.05.016

Gazi, M. A. I., Masud, A. Al, Amin, M. Bin, Hossain, M. S., Ferdous, R., Al-Amin, M., & Senathirajah, A. R. S. (2026). Unveiling the nexus: exploring the relationship of e-satisfaction, e-trust, and online repurchase intentions among students in a developing country. *Humanities and Social Sciences Communications*, *13*(1). https://doi.org/10.1057/s41599-025-06326-1

Gürbüz, A. (2023). Linking service quality to brand performance: Mediating role of trust and satisfaction. Excellence,. *Total Quality Management & Business*, 34(7-8), 789–805.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Planning*, *46*(1–2), 1–12. https://doi.org/10.1016/j.lrp.2013.01.001

Hart, C. (2018). Doing a literature review: Releasing the research imagination (2nd ed.). *Sage Publications.*

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. J. *Ournal of Marketing,* 57(1), 1–22.

Kim, J., & Yum, K. (2024). Enhancing Continuous Usage Intention in E-Commerce Marketplace Platforms: The Effects of Service Quality, Customer Satisfaction, and Trust. *Applied Sciences (Switzerland)*, *14*(17). https://doi.org/10.3390/app14177617

Kotler, P., & Armstrong, G. (2018). Principles of marketing (17th ed.). *Pearson Education.*

Lusiana, & Wardi, Y. (2020). The effect of brand image, service quality, and relationship marketing on satisfaction to increase students' loyalty. *Advances in Economics, Business and Management Research,* 124, 755–759. https://doi.org/https://doi.org/10.2991/aebmr.k.200305.163

McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research,* 13(3), 334–359.

Monfort, M., Sanz, L., & Gómez, F. (2025). Trust as a mediator in the relationship between service quality, brand image, and student satisfaction. Management,. *International Journal of Educational*, 39(2), 120–138.

Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer. McGraw-Hill.*

Osman, A., Ali, M., & Kilic, H. (2024). Brand image, student satisfaction, and loyalty in higher education. *Education and Information Technologies,* 29(3), 255–272.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing,* J 64(1), 12–40.

Pramuditha, R., Muhafidin, D., Sumaryana, A., & Susanti, E. (2024). Exploring the Impacts of e-Government Service Quality on Citizen Satisfaction and Trust: Evidence from Population Administration Services. *Journal of Logistics, Informatics and Service Science*, *11*(8). https://doi.org/10.33168/JLISS.2024.0817

Schlesinger, W., Cervera, A., & Iniesta, M. A. (2021). Brand image and student satisfaction as antecedents of word-of-mouth in higher education. Management,. *International Journal of Educational*, 35(4), 713–729.

Tarafdar, R. (2024). Key dimensions of service quality in higher education: Evidence from India. *Journal of Educational Administration,* 62(3), 234–250.

Taufiqurokhman, T., Satispi, E., Andriansyah, A., Murod, M., & Sulastri, E. (2024). The impact of e-service quality on public trust and public satisfaction in e-government public services. *International Journal of Data and Network Science*, *8*(2). https://doi.org/10.5267/j.ijdns.2024.1.002

Teeroovengadum, V., Kamalanabhan, T. J., & Seebaluck, A. K. (2019). Measuring service quality in higher education: Development of a hierarchical model (HESQUAL). *Quality Assurance in*

Education, 27(4), 107–123.

Utomo, S. B. (2025). The Role of E-Service Quality and Brand Image on Purchase Intention of Smartphone Products. *International Journal of Engineering Science and Information Technology*, *5*(1), 290–296. https://doi.org/10.52088/ijesty.v5i1.714

Uzir, M. U. H., Al Bakri, A. M., & Nordin, M. S. (2021). Last-mile delivery service quality and its effect on e-customer satisfaction and trust. ,. *The Service Industries Journal*, 41(7–8), 471–491.