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The Conjoint Influence of Trust Building and Electronic Marketing on Student Satisfaction: A PLS-SEM Analysis of Ugandan Private Universities

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Abstract: This study investigates the relationship between trust building and student satisfaction within private charter universities in Kampala, Uganda, with a particular emphasis on the moderating role of electronic marketing. Employing a quantitative, cross-sectional survey design, data were collected from 323 third-year students across five universities. Analysis conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) indicated that trust building exerts a significant positive influence on student satisfaction ($\beta = 0.466$, $p < 0.001$). Additionally, electronic marketing was found to significantly moderate this relationship ($\beta = 0.085$, $p < 0.05$), suggesting that effective digital marketing strategies enhance the positive effect of trust on satisfaction. This study contributes to the literature on relationship marketing by illustrating that electronic marketing functions as a conditional variable that fortifies the connection between trust and satisfaction. The findings imply that university administrators should integrate comprehensive trust-building initiatives with strategic electronic marketing to maximize student satisfaction outcomes.

Keywords: *Trust Building, Student Satisfaction, Electronic Marketing, Relationship Marketing, Private Higher Education, Uganda, PLS-SEM.*

1. Introduction

The expansion of private chartered universities in Uganda has intensified competition within the higher education sector, making student satisfaction a crucial determinant of institutional sustainability (Kasozi, 2019; Uganda National Council for Higher Education [NCHE], 2021). In this competitive landscape, the principles of relationship marketing (RM) have gained importance, emphasizing the development of long-term, value-driven relationships with students (Grönroos, 2017). A key element of RM is trusting building, which is defined as establishing reliability, integrity, and benevolence between an institution and its stakeholders (Morgan & Hunt, 1994). In educational contexts, trust is operationalized through consistent service delivery, adherence to commitments, transparent communication, and ethical conduct (Kim & Park, 2017).

At the same time, the digital transformation of higher education has established electronic marketing as a primary medium for student engagement, communication, and service delivery (Chaffey & Ellis-Chadwick, 2019). Digital platforms, including institutional websites, email systems, social media, and mobile applications, have become integral to the student experience, significantly influencing perceptions of service quality and institutional responsiveness (Tuten & Solomon, 2024). While existing literature confirms the positive impact of trust on satisfaction (Rodríguez & Gómez, 2023) and acknowledges the increasing relevance of digital tools (Ahmad et al., 2015), a notable empirical gap remains regarding their interactive effects. Specifically, it is unclear whether electronic marketing merely facilitates communication or actively influences the psychological processes through which institutional trust translates into student satisfaction.

To address this gap, the current quantitative study aims to investigate two primary objectives within the context of private chartered universities in Kampala, Uganda:

1. To examine the direct effect of trust building on student satisfaction.
2. To assess the moderating effect of electronic marketing on the relationship between trust building and student satisfaction.

This study is anchored in Expectancy Disconfirmation Theory (Oliver, 1980) and the Service Quality

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(SERVQUAL) model (Parasuraman et al., 1985), which together provide a framework for understanding how student expectations, perceived performance, and service quality gaps shape satisfaction. By empirically testing the moderating role of electronic marketing, this research contributes to a more nuanced understanding of relationship marketing dynamics in the digital era and offers evidence-based insights for university management.

2. Literature Review & Hypotheses Development

Trust Building and Student Satisfaction

Trust is a multidimensional construct characterized by a willingness to be vulnerable based on positive expectations regarding the behavior of another party (Mayer et al., 1995). In the context of higher education, institutional trust is established through three primary dimensions: ability (the competence of faculty and administration), benevolence (a genuine concern for student welfare), and integrity (adherence to fair and ethical principles) (Rousseau et al., 1998). Empirical studies consistently reveal a positive correlation between institutional trust and student satisfaction. For instance, research conducted in Asian and European contexts has identified transparency, reliable academic support, and fair treatment as significant predictors of student satisfaction (Kim & Park, 2017; Ahmed & Rahman, 2020; Rodríguez & Gómez, 2023). In Uganda, issues such as administrative inefficiency and perceived unfairness have emerged as critical sources of student dissatisfaction, highlighting the erosion of trust (Kasozi & Ssempebwa, 2019). When students possess trust in their institution, they are more inclined to tolerate minor service failures, remain engaged, and report higher overall satisfaction (Obal & Gao, 2022). This leads to the following hypothesis:

H1: Trust building has a significant positive effect on student satisfaction in private chartered universities in Kampala, Uganda.

Electronic Marketing as a Moderator

Electronic marketing (e-marketing) is defined as the utilization of digital technologies to create, communicate, and deliver value to customers (Chaffey & Ellis-Chadwick, 2019). Within the university context, its functions encompass recruitment as well as ongoing relationship management through personalized communication, timely information dissemination, and feedback mechanisms (Kingsnorth, 2023). A moderator is a variable that influences the strength or direction of the relationship between an independent variable and a dependent variable (Baron & Kenny, 1986). This study posits that e-marketing serves as a moderator of the trust-satisfaction relationship by:

i. Reinforcing Reliability: Consistent and accurate digital communication like, timely updates on institutional portals, prompt email alerts) provides tangible and ongoing evidence of institutional reliability.
ii. Enabling Responsiveness: Swift and effective responses to digital inquiries (via email, social media, or chatbots) exemplify the SERVQUAL dimensions of responsiveness and empathy, thereby validating trust in real-time.
iii. Managing Expectations: Clear and accessible online information aligns student expectations with institutional processes, facilitating positive disconfirmation when trusted services are rendered.
iv. Facilitating Personalization: Targeted digital communication enhances the sense of individual recognition, thereby deepening the affective bond beyond a generic institutional relationship (Melewar et al., 2022).

Prior research substantiates the potential for technology to moderate relational outcomes. Studies conducted in Malaysia and the UAE have demonstrated that digital tools enhance the effectiveness of relationship marketing strategies on student outcomes (Ahmad et al., 2015; Irfan & Zahid, 2022). Consequently, we hypothesize:

H2: Electronic marketing positively moderates the relationship between trust building and student satisfaction.

3. Methodology

Research Design

This study utilized a quantitative, descriptive cross-sectional survey design. This methodology is well-suited for investigating relationships between variables at a specific point in time and for testing hypothesized moderating effects (Creswell, 2014).

Population, Sampling, and Data Collection

The target population consisted of third-year students enrolled in the Colleges/Schools of Business and Management and Education at five private chartered universities in Kampala: Kampala International University (KIU), Islamic University in Uganda (IUIU), Uganda Martyrs University (UMU), Ndejje University (NU), and Uganda Christian University (UCU). The total eligible population was 1,685 students.

A sample size of 323 was calculated using Yamane's (1973) formula, incorporating a 95% confidence level and a 5% margin of error. Proportional stratified random sampling was employed to ensure adequate representation from each university and faculty. Self-administered structured questionnaires were distributed,

2026; 2-3 (2026) | pp:136-140

and all 323 were completed and returned, resulting in a 100% response rate.

Data Analysis

Data were analyze using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4.0. PLS-SEM is appropriate for predictive research, modeling complex relationships involving latent variables, and testing moderation effects (Hair et al., 2022). The analysis followed a two-stage approach:

Measurement Model Assessment: This phase evaluated internal consistency (Composite Reliability), convergent validity (Average Variance Extracted, AVE), and discriminant validity (Fornell-Larcker criterion).

Structural Model Assessment: This phase examined the significance of path coefficients (utilizing bootstrapping with 5,000 subsamples), the coefficient of determination (R^2), effect sizes (f^2), and predictive relevance (Q^2). The moderating effect (H2) was tested using the product-indicator approach (Henseler & Fassott, 2010).

4. Results

Measurement Model Results

The measurement model demonstrated satisfactory reliability and validity following the removal of items with outer loadings below 0.60 (Hair et al., 2022). As presented in Table 1, all Composite Reliability (CR) values exceeded 0.70, and all Average Variance Extracted (AVE) values surpassed 0.50, confirming internal consistency and convergent validity. Discriminant validity was established using the Fornell-Larcker criterion (Table 2), as the square root of each construct's AVE (diagonal) was greater than its correlations with other constructs.

Table 1: Reliability and Convergent Validity

Construct	Items	Composite Reliability (CR)	Average Variance Extracted (AVE)
Trust Building	7	0.836	0.561
Electronic Marketing	9	0.881	0.788
Student Satisfaction	8	0.877	0.588

Table 2: Fornell-Larcker Criterion for Discriminant Validity

Construct	Trust Building	Electronic Marketing	Student Satisfaction
Trust Building (TB)	**0.749**		
Electronic Marketing (EM)	0.465	**0.887**	
Student Satisfaction (SS)	0.466	0.428	**0.767**

Structural Model and Hypotheses Testing

Metric	Value
R^2	0.412
Q^2 (Predictive Relevance)	0.287

The structural model demonstrated moderate explanatory power, accounting for 41.2% of the variance in Student Satisfaction ($R^2 = 0.412$), indicating that Trust Building and Electronic Marketing are meaningful predictors while acknowledging the construct's multifaceted nature. Furthermore, the model achieved a Stone-Geisser Q^2 value of 0.287, which, being substantially above zero, confirms its predictive relevance and out of sample validity. These results collectively suggest that the model not only explains a significant portion of the phenomenon but is also robust enough to reliably forecast student satisfaction beyond the immediate dataset.

Hypotheses Testing

Hypothesis	Path / Effect	β (Coefficient)	p-value	f^2 (Effect Size)	Result
H1	Trust Building → Student Satisfaction	0.466	0.001	0.278	Supported
H2	Trust Building × Electronic Marketing → Student Satisfaction	0.085	0.05	0.012	Supported

The analysis provides empirical support for both proposed hypotheses. First, Trust Building exhibited a strong, positive, and statistically significant direct effect on Student Satisfaction ($\beta = 0.466$, $p = 0.001$), with a medium-to-large effect size ($f^2 = 0.278$). This confirms H1 and establishes trust as a fundamental driver of student satisfaction. Second, the interaction term (Trust Building × Electronic Marketing) was positive and significant ($\beta = 0.085$, $p = 0.05$), supporting H2. Although the effect size was small ($f^2 = 0.012$); which is typical for detecting moderation effects in field studies, the finding is theoretically meaningful. It indicates that

2026; 2-3 (2026) | pp:136-140

Electronic Marketing functions as a positive moderator, subtly amplifying the impact of trust on satisfaction. Collectively, these results suggest that while trust is the primary mechanism, its effectiveness is enhanced when complemented by strategic digital marketing efforts.

5. Discussion

The findings provide robust support for both hypotheses. The significant direct effect of Trust Building on Student Satisfaction (H1: $\beta = 0.466$, $p < 0.001$) reaffirms its foundational role in relationship marketing within higher education (Morgan & Hunt, 1994). In the Ugandan context, this confirms that despite competitive pressures, fostering student trust through consistent, ethical service delivery remains a non-negotiable prerequisite for satisfaction.

The confirmation of H2 constitutes the study's primary contribution. The significant positive interaction ($\beta = 0.085$, $p < 0.05$) demonstrates that Electronic Marketing actively enhances the trust-satisfaction dynamic. Through the lens of Expectancy Disconfirmation Theory, effective e-marketing aligns student expectations with institutional realities. When trust exists, positive digital interactions serve as frequent, low-cost confirmations of that trust, amplifying satisfaction. Conversely, poor digital experiences may erode satisfaction even when offline trust is present. This explains variance in satisfaction among students attending the same institution.

Conclusions and Implications

Theoretical Implications

This study advances relationship marketing theory by empirically establishing Electronic Marketing as a significant moderator of the trust-satisfaction relationship. It moves beyond viewing digital tools as passive infrastructure, positioning them as active agents that amplify core relational outcomes.

Practical Implications

For university administrators, the findings prescribe a dual strategy. First, institutionalize trust by embedding competence, benevolence, and integrity into core operations through consistent service delivery, transparent policies, and student-centered staff training. Second, leverage electronic marketing strategically by treating digital platforms as trust amplifiers. This requires ensuring website reliability, establishing responsiveness standards for all digital channels, and maintaining consistent messaging across touchpoints. Every digital interaction; from portal functionality to social media engagement; must validate student trust, thereby maximizing its impact on satisfaction. In essence, technology should function not merely as a communication tool, but as a tangible demonstration of institutional reliability and care.

Limitations and Future Research

As a cross-sectional study, causal inferences are limited; longitudinal research could track evolving trust-digital dynamics. The sample was confined to business and education faculties in Kampala; broader disciplinary and regional sampling would enhance generalizability. Future studies could disaggregate e-marketing dimensions to identify the most effective digital practices.

In conclusion, optimizing student satisfaction requires synergy: building institutional trust while mastering the digital tools that validate and strengthen that trust at every interaction.

References

Ahmad, N., Ahmed, R. R., & Nawaz, M. (2015). The role of electronic marketing in higher education: A case study of Malaysian universities. Asian Social Science, 11(21), 183-193.

Ahmed, S., & Rahman, M. (2020). Trust and satisfaction in higher education: Evidence from private universities in Bangladesh. Journal of Marketing for Higher Education, 30(2), 189-208.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.

Chaffey, D., & Ellis-Chadwick, F. (2019). Digital marketing: Strategy, implementation and practice (7th ed.). Pearson.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approach (4th ed.). SAGE Publications.

Grönroos, C. (2017). Relationship marketing readiness: Theoretical background and measurement directions. Journal of Services Marketing, 31(3), 218-225.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). SAGE Publications.

Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), Handbook of partial least squares (pp. 713-735). Springer.

Irfan, A., & Zahid, D. (2022). Digital transformation and student satisfaction in UAE universities: The mediating role of service quality. Education and Information Technologies, 27(4), 5123-5145.

Kasozi, A. B. K. (2019). The state of higher education in Uganda: Progress, challenges, and opportunities. Fountain Publishers.

Kasozi, A. B. K., & Ssempebwa, J. (2019). Governance and management challenges in Ugandan private universities. Journal of Higher Education in Africa, 17(1), 45-68.

Kim, J., & Park, J. (2017). The role of trust in university-student relationships: A cross-cultural comparison. Journal of Marketing for Higher Education, 27(1), 45-65.

Kingsnorth, S. (2023). Digital marketing strategy: An integrated approach to online marketing (3rd ed.). Kogan Page.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, 20(3), 709-734.

Melewar, T. C., Dennis, C., & Foroudi, P. (2022). Building corporate identity, image and reputation in the digital era. Routledge.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. Journal of Marketing, 58(3), 20-38.

Obal, M., & Gao, T. (2022). Managing service failures in higher education: The role of trust and recovery strategies. Journal of Marketing for Higher Education, 32(1), 78-95.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. Journal of Marketing Research, 17(4), 460-469.