



Impact of Customer Orientation and Digital Marketing on Educational Services

Erva Suriyanti^{1*} , Ramadhania² , Heriyadi³ 

^{1,2,3}Faculty of Economics and Business, Tanjungpura University, Indonesia

¹b3081241001@student.untan.ac.id, ²ramadhania@ekonomi.untan.ac.id, ³heriyadi@ekonomi.untan.ac.id

*Corresponding Author

Article Info

Article history:

Submission February 19, 2025

Revised July 7, 2025

Accepted March 31, 2026

Published June 23, 2026

Keywords:

Customer Orientation

Marketing Digitalization

Educational Service Performance

Era of Technological Disruption



ABSTRACT

The rapid advancement of digital technology in this era of disruption compels educational institutions to continuously adapt and innovate. Such transformations necessitate adjustments in the delivery and performance of educational services, highlighting the importance of identifying key factors that influence service effectiveness. **This study investigates** the impact of customer orientation and digital marketing practices on the performance of educational services within the context of technological disruption. **A quantitative approach** was employed, with data collected through structured questionnaires. The population comprised formal primary and secondary educational institutions, from which 109 respondents were randomly selected. The collected data were analyzed using path analysis supported by SPSS software. **The findings** reveal that both customer orientation and digital marketing adoption significantly and positively affect the performance of educational services. The application of well-designed digital marketing strategies, along with efforts to address customer needs and expectations, contributes to higher levels of customer satisfaction and enhances institutional reputation. Consequently, these factors lead to improved service performance. **The study concludes** that educational institutions must embrace a more customer-oriented perspective and optimize the use of digital technologies to maintain relevance and competitiveness in an increasingly dynamic environment.

This is an open access article under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license.



DOI: <http://doi.org/10.34306/att.v8i2.634>

This is an open-access article under the [CC-BY license \(https://creativecommons.org/licenses/by/4.0/\)](https://creativecommons.org/licenses/by/4.0/)

©Authors retain all copyrights

1. INTRODUCTION

The intensifying competition among educational institutions has driven universities and other providers to continuously enhance the quality of their services [1]. In today's educational environment, institutions are not only required to achieve academic excellence but also to deliver service experiences that align with the expectations of students and stakeholders [2]. Consequently, many educational organizations are increasingly adopting managerial approaches that focus on creating customer value and utilizing digital platforms for strategic communication [3].

Customer orientation is widely acknowledged as a crucial strategic approach in service-oriented organizations [4]. This perspective highlights the importance of understanding customer needs, preferences, and expectations as a foundation for delivering superior value [5]. Within the educational context, students are often viewed as the primary customers, whose satisfaction and engagement significantly influence institutional

performance [6]. Institutions that cultivate a strong customer-oriented culture are more capable of designing services that effectively address student expectations and improve overall service quality [7].

In addition to the growing focus on customer orientation, advancements in digital technology have reshaped how educational institutions interact and communicate with their stakeholders [8]. Digital marketing has become a vital instrument for promoting services, sharing information, and establishing long-term relationships with prospective students and the wider community [9]. By leveraging digital platforms such as websites, social media, and other online communication tools, institutions are able to reach broader audiences while maintaining efficient and interactive engagement [2].

This study seeks to analyze the impact of customer orientation and digital marketing on the performance of educational services [6]. A quantitative research design was implemented, with data gathered through structured questionnaires distributed to respondents [10]. The data were subsequently analyzed using appropriate statistical methods to examine the relationships between customer orientation, digital marketing, and service performance in education [11].

The results demonstrate that both customer orientation and digital marketing significantly influence the quality and effectiveness of educational services [12]. Institutions that prioritize a deep understanding of student needs and actively adopt digital marketing strategies tend to achieve superior service performance [13]. These findings emphasize the importance of integrating customer-oriented strategies with digital communication technologies to strengthen institutional competitiveness and ensure long-term sustainability in the education sector.

2. RESEARCH METHOD

This study adopts a quantitative research approach, which refers to a method of gathering data or information that can be objectively measured using structured research instruments. This approach relies on numerical data to address research questions and test hypotheses, grounded in positivist principles that emphasize observable and measurable evidence [14]. Data were collected questionnaires distributed to respondents. The population of this study includes all formal educational institutions that offer primary and secondary education. The sample was selected using a random sampling technique, resulting in a total of 100 respondents. The sampling criteria encompass formal educational institutions, including elementary schools, junior high schools, and senior high schools.

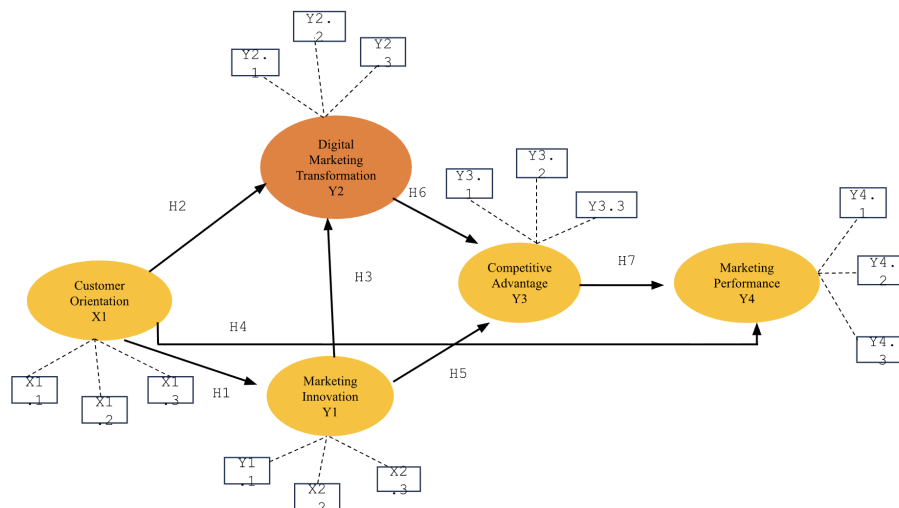


Figure 1. Conceptual Framework

Furthermore, the institutions involved in this study are required to hold accreditation from a recognized accrediting body to ensure the quality of education delivered. They must also have adopted technological integration in both learning and marketing activities as part of the digitalization process. The collected data were analyzed using SPSS, selected for its capability to examine relationships among research variables. The conceptual framework of this study is presented below. Based on the preceding explanation, the research

hypotheses are formulated as illustrated in Figure 1.

- H1: Customer Orientation positively affects the performance of educational services in the context of technological disruption.
- H2: Digital Marketing positively impacts the performance of educational services in the era of technological disruption.

3. RESULT

3.1. Validity Test

Validity testing is a crucial procedure to determine whether a measurement instrument can effectively and accurately capture the intended construct or variable being examined.

Table 1. Validity Test

| Variable | | X1 | Y1 | Y2 | Y3 | Y4 |
|----------|---------------------|---------|---------|---------|---------|---------|
| X1 | Pearson Correlation | 1 | 0.595** | 0.510** | 0.470** | 0.244* |
| | Sig. (2-tailed) | | <0.001 | <0.001 | <0.001 | 0.011 |
| | N | 109 | 109 | 109 | 109 | 109 |
| Y1 | Pearson Correlation | 0.595** | 1 | 0.643** | 0.640** | 0.470** |
| | Sig. (2-tailed) | <0.001 | | <0.001 | <0.001 | <0.001 |
| | N | 109 | 109 | 109 | 109 | 109 |
| Y2 | Pearson Correlation | 0.510** | 0.643** | 1 | 0.584** | 0.423** |
| | Sig. (2-tailed) | <0.001 | <0.001 | | <0.001 | <0.001 |
| | N | 109 | 109 | 109 | 109 | 109 |
| Y3 | Pearson Correlation | 0.470** | 0.640** | 0.584** | 1 | 0.325** |
| | Sig. (2-tailed) | <0.001 | <0.001 | <0.001 | | <0.001 |
| | N | 109 | 109 | 109 | 109 | 109 |
| Y4 | Pearson Correlation | 0.244* | 0.470** | 0.423** | 0.325** | 1 |
| | Sig. (2-tailed) | 0.011 | <0.001 | <0.001 | <0.001 | |
| | N | 109 | 109 | 109 | 109 | 109 |

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Based on the results presented in Table 1, all measurement items exhibit significance values (2-tailed) that are below the threshold of 0.05. This indicates that each item demonstrates a statistically significant correlation. Therefore, all questionnaire statements can be considered valid, and the instrument as a whole is appropriate for use in this study.

3.2. Reliability Test

Reliability testing refers to a process used to assess the extent to which a research instrument produces consistent, stable, and dependable results across repeated measurements or varying conditions. An instrument is considered reliable when it consistently reflects the true characteristics of the variable being measured, rather than being influenced by random error, thereby improving the accuracy and credibility of the research outcomes.

| Table 2. Reliability Test Results | |
|-----------------------------------|------------|
| Cronbach's Alpha | N of Items |
| 0.810 | 5 |

The reliability test results presented in Table 2 indicate that the Cronbach's Alpha coefficient is 0.697, exceeding the minimum acceptable threshold of 0.600. This suggests that the questionnaire demonstrates an adequate level of internal consistency and is therefore suitable for use in subsequent analysis.

3.3. Normality Test

Normality testing is a statistical procedure applied to assess whether the distribution of sample data closely follows a normal distribution. This evaluation helps researchers verify whether the data meet the assumptions necessary for parametric statistical methods, thereby ensuring the validity and reliability of subsequent analyses.

Table 3. Normality Test Results

| Variable | Kolmogorov–Smirnov ^a | | | Shapiro–Wilk | | |
|----------|---------------------------------|-----|--------|--------------|-----|--------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| X1 | 0.188 | 109 | <0.001 | 0.885 | 109 | <0.001 |
| Y1 | 0.134 | 109 | <0.001 | 0.945 | 109 | <0.001 |
| Y2 | 0.131 | 109 | <0.001 | 0.939 | 109 | <0.001 |
| Y3 | 0.171 | 109 | <0.001 | 0.908 | 109 | <0.001 |
| Y4 | 0.132 | 109 | <0.001 | 0.932 | 109 | <0.001 |

Based on the results presented in Table 3, the normality test indicates a significance value of less than 0.05, suggesting that the data are normally distributed.

3.4. Regression Test

Regression analysis refers to a statistical approach employed to examine the relationship between one or more independent variables and a dependent variable. This technique allows researchers to identify the direction and strength of these relationships, as well as to evaluate how effectively the independent variables account for variations in the dependent variable.

Table 4. Regression Test Results

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|--------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.333 | 3.038 | | 0.768 | 0.444 |
| | X1 | 0.842 | 0.110 | 0.595 | 7.664 | <0.001 |

As shown in Table 4, the independent variable (X1), Customer Service, demonstrates a coefficient value of 0.842, with a t-statistic of 7.664 and a significance level (Sig.) below 0.001. These results indicate that Customer Service has a positive and statistically significant effect on the dependent variable (Y1), namely Marketing Innovation. The regression coefficient (B = 0.842) suggests that a one-unit increase in Customer Service is associated with an increase of 0.842 units in Marketing Innovation. The relatively high t-value and the very low significance level further confirm the robustness of this relationship, indicating that the effect is unlikely to occur by chance.

Table 5. Regression Test Results

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|--------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.842 | 2.316 | | 1.227 | 0.222 |
| | X1 | 0.514 | 0.084 | 0.510 | 6.132 | <0.001 |

As shown in Table 5, the independent variable (X1) yields a coefficient value of 0.514, with a t-statistic of 6.132 and a significance level (Sig.) below 0.001. This result indicates that Customer Service (X1) has a positive and statistically significant effect on the dependent variable (Y2), namely Digital Marketing Transformation. The regression coefficient (B) implies that each one-unit increase in Customer Service is associated with a 0.514 increase in Digital Marketing Transformation.

As shown in Table 6, the independent variable (Y1) produces a coefficient value of 0.458, with a t-statistic of 8.686 and a significance level (Sig.) below 0.001. This result indicates that Marketing Innovation (Y1) has a positive and statistically significant effect on the dependent variable (Y2), namely Digital Marketing Transformation.

Table 6. Regression Test Regression Test

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.664 | 3.223 | | 0.826 | 0.410 |
| | X1 | 0.303 | 0.117 | 0.244 | 2.602 | 0.011 |

The regression coefficient (B) suggests that a one-unit increase in Marketing Innovation is associated with a 0.458 increase in Digital Marketing Transformation. These findings highlight the important role of marketing innovation in driving and strengthening digital marketing transformation.

Table 7. Regression Test Results

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|--------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.414 | 0.915 | | 5.916 | <0.001 |
| | Y1 | 0.306 | 0.036 | 0.640 | 8.609 | <0.001 |

As shown in Table 7, the independent variable (Y1) has a coefficient value of 0.306, with a t-statistic of 8.609 and a significance level (Sig.) below 0.001. This indicates bahwa Marketing Innovation (Y1) has a positive and statistically significant effect on the dependent variable (Y3), namely Competitive Advantage. The regression coefficient (B) suggests that a one-unit increase in Marketing Innovation leads to an increase of 0.306 in Competitive Advantage.

Furthermore, the results presented in Table 8 reveal that the independent variable (Y2) has a coefficient value of 0.393, with a t-statistic of 7.449 and a significance level below 0.001. This finding confirms that Digital Marketing Transformation (Y2) also has a positive and statistically significant influence on Competitive Advantage (Y3). The coefficient (B) indicates that each one-unit increase in Digital Marketing Transformation contributes to a 0.393 increase in Competitive Advantage.

Overall, these findings demonstrate that both marketing innovation and digital marketing transformation play critical roles in strengthening competitive advantage. Organizations that invest in innovative marketing practices and actively embrace digital transformation are more likely to become adaptive, customer-oriented, and strategically positioned to compete effectively in a rapidly evolving and technology-driven environment.

Table 7 indicates that Marketing Innovation (Y1) yields a coefficient of 0.306, accompanied by a t-value of 8.609 and a significance level below 0.001, confirming a positive and statistically significant relationship with Competi.

Table 8. Regression Test Results

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|--------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.414 | 0.915 | | 5.916 | <0.001 |
| | Y1 | 0.306 | 0.036 | 0.640 | 8.609 | <0.001 |

As shown in Table 8, the independent variable (Y3) demonstrates a coefficient value of 0.597, with a t-statistic of 3.559 and a significance level (Sig.) below 0.001. This indicates that Competitive Advantage (Y3) has a positive and statistically significant effect on the dependent variable (Y4), namely Marketing Performance. The regression coefficient (B) suggests that a one-unit increase in Competitive Advantage is associated with an increase of 0.597 in Marketing Performance.

3.5. Customer Service has a positive influence on Marketing Innovation

Customer service has a positive impact on marketing innovation by enabling direct interaction with customers and generating valuable insights into their needs and preferences [15]. These insights help organizations design more relevant and innovative marketing strategies, while customer feedback supports the development of products aligned with market trends [16, 17].

High-quality customer service also enhances customer satisfaction and loyalty, increasing the effectiveness and acceptance of marketing innovations [18]. Furthermore, the integration of technologies such as

analytics and AI strengthens this role by enabling real-time data collection and more strategic decision-making. Overall, the synergy between customer service and marketing innovation improves adaptability, competitiveness, and long-term organizational sustainability [19, 20].

3.6. Customer Service Positively Influences Digital Marketing Transformation

Customer service has a positive influence on digital marketing transformation by enabling direct interactions with customers through digital platforms such as email, social media, and chatbots [21]. These interactions provide valuable insights into customer needs, which can be utilized to develop more personalized and relevant marketing strategies [22].

Effective digital customer service also strengthens customer–brand relationships, enhancing satisfaction, loyalty, and brand reputation, which are essential for successful digital marketing initiatives [23, 24]. Moreover, the integration of technologies such as data analytics, automation, and artificial intelligence allows organizations to generate real-time insights and optimize marketing strategies more efficiently [25]. Overall, responsive and technology-driven customer service accelerates digital marketing transformation by improving customer experience and enabling more targeted and effective marketing performance [26].

3.7. Marketing Innovation has a positive influence on Digital Marketing Transformation

Marketing innovation has a significant impact on digital marketing transformation by enabling more effective and efficient approaches to promoting products and services [27]. Through the use of advanced technologies such as big data, artificial intelligence, and machine learning, organizations can develop more targeted and relevant marketing strategies, while also adapting to and shaping evolving market trends [28].

Furthermore, marketing innovation supports greater personalization by leveraging customer data to deliver tailored experiences, which enhances customer satisfaction and conversion rates [29]. Technologies such as chatbots, AI, and social media platforms also improve real-time interaction and campaign effectiveness [30].

In addition, digital marketing innovation expands market reach and strengthens global competitiveness through the integration of digital channels, while also enhancing customer engagement through data-driven and interactive content strategies [31, 32]. Finally, it improves efficiency by reducing operational costs and enabling real-time performance monitoring, allowing firms to respond quickly to market changes and deliver better customer experiences [33–35].

3.8. Customer Orientation Positively Influences Marketing Performance

Customer orientation has a positive effect on marketing performance by enabling firms to better understand customer needs and align their products, services, and strategies accordingly [36, 37]. This approach enhances customer satisfaction and loyalty, which in turn improves key marketing outcomes such as sales, market share, and retention [38].

Furthermore, customer-oriented firms are more responsive to market changes and consumer preferences, allowing them to adapt strategies and introduce relevant innovations [39, 40]. Effective customer orientation also improves communication and targeting, ensuring that marketing messages resonate with the intended audience and enhance overall campaign effectiveness [41, 42]. Overall, by prioritizing customer value, companies can strengthen relationships, improve efficiency, and achieve superior marketing performance while maintaining competitiveness [43].

3.9. Marketing Innovation Positively Influences Competitive Advantage

Marketing innovation has a positive effect on competitive advantage by enabling firms to develop differentiated strategies that enhance customer attraction and market positioning [9, 44]. Through the adoption of new technologies, creative approaches, and innovative business models, companies can respond more effectively to market changes and expand their reach [45, 46].

Additionally, the use of customer data and analytics improves marketing efficiency and supports better decision-making, while innovations that enhance customer experience strengthen loyalty and brand reputation [8, 47].

3.10. Digital Marketing Transformation Positively Influences Competitive Advantage

Digital marketing transformation significantly enhances a firm's competitiveness by leveraging digital technologies and online platforms to improve marketing effectiveness. It enables broader audience reach,

personalized communication, and better insights into consumer preferences, facilitating products and services that align with market demands [48].

Moreover, integrating multiple digital channels—such as social media, SEO, digital advertising, and email marketing—creates a seamless customer experience, improves brand visibility, and increases conversion rates. Real-time analytics and marketing automation further enhance agility, allowing firms to respond promptly to market changes and customer needs. Finally, digital transformation fosters innovation through advanced technologies like AI and machine learning, supporting adaptive, data-driven campaigns and improved customer experience. This strengthens product and service differentiation, providing sustainable competitive advantage and enabling firms to outperform competitors.

3.11. Competitive Advantage and Marketing Performance

Competitive advantage enables firms to differentiate themselves through products, services, or brand image, enhancing customer attraction and loyalty [49]. A strong market position helps attract new customers, retain existing ones, and improve overall marketing performance.

It also allows organizations to use internal resources more efficiently. Firms with cost advantages can offer competitive pricing or flexible promotions, while those with differentiation advantages can emphasize unique attributes to boost conversion rates [50]. Moreover, competitive advantage fosters innovation in marketing strategies, enabling proactive and creative campaigns that reach wider audiences. It also enhances adaptability to market trends and emerging channels, supporting more targeted, efficient, and effective marketing initiatives, ultimately improving overall marketing performance.

4. MANAGERIAL IMPLICATIONS

The findings of this study imply that educational institutions must integrate customer orientation and digital marketing transformation into their core managerial strategies. School leaders should place students and parents at the center of decision-making by systematically collecting feedback, improving service responsiveness, and continuously enhancing academic and administrative quality. A strong customer-oriented culture enables institutions to better understand stakeholder expectations, design more relevant programs, and build long-term trust and loyalty. This strategic focus not only improves satisfaction but also strengthens the overall performance of educational services in a highly competitive environment.

At the same time, institutions need to strategically leverage digital marketing to expand market reach and reinforce their competitive position. Investing in optimized websites, active social media engagement, data analytics, and digital communication tools allows schools to deliver personalized information and respond more quickly to market changes. The integration of customer insights with digital platforms supports more effective branding, stronger public image, and improved engagement with prospective students and parents. By aligning service excellence with digital innovation, educational institutions can enhance sustainability, competitiveness, and long-term performance in the era of technological disruption.


5. CONCLUSION

The study concludes that customer orientation and digital marketing significantly enhance the performance of educational services in the era of technological disruption. Institutions that adopt customer-centric practices and effectively implement digital marketing can better meet the needs of students and parents, increasing satisfaction and strengthening institutional reputation. High satisfaction and a positive image ultimately improve overall service performance, highlighting the importance of customer focus and digital adoption for competitiveness and relevance. For digital banking, the findings imply that improving customer service and ensuring technical reliability are critical for reputation and service quality. Leveraging positive perceptions of technological innovation, banks can adopt proactive marketing strategies, enhance support systems through responsive staff or intelligent chatbots, and prioritize application stability to improve user experience.

Sentiment analysis revealed that “Technological Innovation” received the highest positive feedback, whereas “Technical Issues” generated the lowest. These insights emphasize the role of public perception in shaping reputation and provide guidance for strategic improvements. Overall, the findings offer practical recommendations for enhancing service performance and strengthening market position in competitive environments.

6. DECLARATIONS

6.1. About Authors

Erva Suriyanti (ES)  <https://orcid.org/0009-0000-7280-3513>

Ramadania (RR)  <https://orcid.org/0000-0002-6725-6399>

Heriyadi (HD)  <https://orcid.org/0009-0001-6827-4839>

6.2. Author Contributions

Conceptualization: ES, RR, and HD; Methodology: ES, RR and HD; Software: ES, and RR Formal Analysis: ES, EE, and HD; Investigation: RR and HD; Resources: ES and HD; Data Curation: ES, EE and HD; Writing Original Draft Preparation: EA and AP; Writing Review and Editing: RR and HD; Visualization: ES and RR; All authors, ES, RR, and HD have read and agreed to the published version of the manuscript.

6.3. Data Availability Statement

The datasets used to support the findings of this study are available from the direct link in the dataset citation.

6.4. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

REFERENCES

- [1] H. Shaheen, "Social media marketing research: a bibliometric analysis from scopus," *Future Business Journal*, vol. 11, no. 1, pp. 1–26, 2025.
- [2] M. James, "Detection of crop pest infestations using ai-enhanced drone imagery and spectral pattern recognition," 2025.
- [3] L. Changwen, B. Vongchavalitkul, and A. Navavongsathian, "The influence of service quality, perceived value, satisfaction, and trust towards loyalty in universities," *Rajapark Journal*, vol. 19, no. 62, pp. 63–82, 2025.
- [4] T. Zahra, "The influence of social media marketing on consumer brand engagement and brand knowledge in fast food products," *Manajemen Dan Bisnis*, vol. 24, no. 1, pp. 12–26, 2025.
- [5] Y. Nath, P. Kumar, and M. Pradeep, "Enhancing customer-salesperson relationships: The role of salesperson behavioral traits and relational cohesion in the banking sector," *Journal of Relationship Marketing*, pp. 1–30, 2025.
- [6] D. Novianti and B. Baihaqi, "The influence of e-payment and e-commerce services on supply chain performance msmes," *Asian Journal of Applied Business and Management*, vol. 4, no. 2, pp. 405–420, 2025.
- [7] T. Sak, I. Mylko, O. Ivashko, I. Chulipa, T. Wołowiec, and J. Sokołowska-Woźniak, "How the digital economy is revolutionizing marketing management and driving sustainable development," *Sustainability*, vol. 17, no. 3, p. 1130, 2025.
- [8] M. A. Hossain, R. Wu, A. Kalam, A. Al Masud, T. Islam, and S. Nur Habib, "The impact of higher education service quality on institutional image and student satisfaction: The role of institutional image as mediator," *International Social Science Journal*, 2025.
- [9] F. Mohamed, "The impact of social media, entrepreneurial orientation and managerial networks on the performance of tunisian smes," *Journal of Entrepreneurship and Public Policy*, 2025.
- [10] A. Pambudi, N. Lutfiani, M. Hardini, A. R. A. Zahra, and U. Rahardja, "The digital revolution of startup matchmaking: Ai and computer science synergies," in *2023 Eighth International Conference on Informatics and Computing (ICIC)*. IEEE, 2023, pp. 1–6.
- [11] S. Pratama and L. A. M. Nelloh, "Leveraging influencer marketing in higher education: Key roles, sectors, platforms, and influencer types for institutional branding," *Startupreneur Business Digital (SABDA Journal)*, vol. 4, no. 2, pp. 134–145, 2025.

- [12] T. Hongsuchon, U. Rahardja, A. Khan, T.-H. Wu, C.-W. Hung, R.-H. Chang, C.-H. Hsu, and S.-C. Chen, "Brand experience on brand attachment: The role of interpersonal interaction, feedback, and advocacy," *Emerging Science Journal*, vol. 7, no. 4, pp. 1232–1246, 2023.
- [13] L. H. Wei, T. Kian Lam, and L. P. Mey, "Tailoring the digital pitch: gender-specific strategies for maximizing social media ad impact on purchase intention," *Asia-Pacific Journal of Business Administration*, 2025.
- [14] N. Chotisarn and T. Phuthong, "Mapping the landscape of marketing technology: trends, theories and trajectories in ecosystem research," *Cogent Business & Management*, vol. 12, no. 1, p. 2448608, 2025.
- [15] U. Rusilowati, U. Narimawati, Y. R. Wijayanti, U. Rahardja, and O. A. Al-Kamari, "Optimizing human resource planning through advanced management information systems: A technological approach," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 6, no. 1, pp. 72–83, 2024, <https://doi.org/10.34306/att.v6i1.390>.
- [16] E. K. Alotaibi, I. Khanfar, B. Ismaeel, and A. S. Shkeer, "Analyzing the influence of direct marketing strategies on consumer purchasing decisions," *Heritage and Sustainable Development*, vol. 7, no. 1, pp. 329–338, 2025.
- [17] S. Yuliani, T. Hidayat, H. Herawaty, and Hernani, "Characteristics of cocoa drinks formulated with nanoencapsulated vitamin and mineral," in *AIP Conference Proceedings*, vol. 2957, no. 1. AIP Publishing LLC, 2024, p. 060058.
- [18] O. Nkpurukwe, G. Arumdeben, and K. Tungkir, "Digital marketing communication strategies: A sure way of gaining customer patronage," *Abuja journal of business and management*, vol. 3, no. 1, 2025.
- [19] Hernani, C. Winarti, T. Hidayat, A. Bin Arif, and S. Yuliani, "Physicochemical evaluation of coated ginger during long-term storage: Impact of chitosan and beeswax bilayer coatings at different temperatures," *Scientifica*, vol. 2024, no. 1, p. 2054943, 2024.
- [20] J. Wilson and E. Erika, "Empowering eco-innovation through digitalization in startup enterprises," *Startupreneur Business Digital (SABDA Journal)*, vol. 4, no. 2, pp. 146–154, 2025.
- [21] S. Syam, "A systematic literature review on the role of artificial intelligence in digital marketing strategies," *Income Journal Of Economics Development*, vol. 6, no. 1, pp. 1–6, 2025.
- [22] P. Wang and Y. Hou, "The effects of hotel employees' attitude toward the use of ai on customer orientation: The role of usage attitudes and proactive personality," *Behavioral Sciences*, vol. 15, no. 2, p. 127, 2025.
- [23] N. Novilia, S. A. Bethari, H. Rusli, and M. B. Amran, "Determination of hydrotreated vegetable oil (hvo) in blended diesel fuel using calibration of isoctane by gc-fid measurement," *Scientific Contributions Oil and Gas*, vol. 48, no. 3, pp. 259–267, 2025.
- [24] A. Kumar, D. Rayne, J. Salo, and C. S. Yiu, "Battle of influence: Analysing the impact of brand-directed and influencer-directed social media marketing on customer engagement and purchase behaviour," *Australasian Marketing Journal*, vol. 33, no. 1, pp. 87–95, 2025.
- [25] R. Swadhi, K. Gayathri, S. Dimri, A. Balakrishnan, and P. Jyothi, "Role of digital marketing in shaping travel decisions: Consumer behavior in tourism," in *Intersections of Niche Tourism and Marketing*. IGI Global Scientific Publishing, 2025, pp. 153–176.
- [26] N. D. Hat, K.-L. Tan, N. L. Ngoc Vi, N. A. Phu, and H. Ting, "The influence of customer relationship management in enhancing hospitality business performance: The conditional mediation of digital marketing capabilities," *International Journal of Hospitality & Tourism Administration*, vol. 26, no. 3, pp. 520–546, 2025.
- [27] A.-M. Nyquist, M. Farshid, and T. Brown, "Employing digital twin technology in the pursuit to avert sustainable marketing myopia," *Journal of Research in Marketing and Entrepreneurship*, vol. 27, no. 2, pp. 277–293, 2025.
- [28] D. Safitri and N. Komaryatin, "Digital marketing influence on marketing performance: The role of customer engagement and relationship marketing," *Golden Ratio of Marketing and Applied Psychology of Business*, vol. 5, no. 2, pp. 316–331, 2025.
- [29] R. Odoom, P. T. Odoom, P. Y. Amu, and M. Adams, "Sustainable digital marketing practices and consumer brand engagement—a brand reputation mediation investigation," *Journal of Strategic Marketing*, vol. 33, no. 2, pp. 254–270, 2025.
- [30] M. Kamyabi, H. Özgit, and J. N. Ahmed, "Sustaining digital marketing strategies to enhance customer engagement and brand promotion: Position as a moderator," *Sustainability*, vol. 17, no. 7, p. 3270, 2025.
- [31] A. Manao, A. Rahayu, and H. Hendrayati, "Value chain strategy in marketing: Turning challenges into op-

- portunities in the digital age.” *Dinasti International Journal of Education Management & Social Science*, vol. 6, no. 2, 2024.
- [32] P. Kumar and G. Singh, “Using social media and digital marketing tools and techniques for developing brand equity with connected consumers,” in *Research Anthology on Social Media Advertising and Building Consumer Relationships*. IGI Global Scientific Publishing, 2022, pp. 1703–1722.
- [33] A. Masrianto, H. Hartoyo, A. V. S. Hubeis, and N. Hasanah, “Digital marketing utilization index for evaluating and improving company digital marketing capability,” *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 8, no. 3, p. 153, 2022.
- [34] A. Al Adwan, H. Kokash, R. Al Adwan, and A. Khattak, “Data analytics in digital marketing for tracking the effectiveness of campaigns and inform strategy,” *International Journal of data and network science*, 2023.
- [35] I. Foziljonov, A. Umarov, B. Khursanaliyev, A. Yusupov, and R. Umarova, “Sustainability-driven digital marketing in entrepreneurship via business intelligence systems,” in *SHS Web of Conferences*, vol. 216. EDP Sciences, 2025, p. 01042.
- [36] M. M. Hasan, Y. Chang, K. Hussain, and L. Tingyu, “Exploring the nexus between social media marketing and patients’ participation in value co-creation: a pathway toward patient well-being,” *Online Information Review*, vol. 49, no. 3, pp. 623–642, 2025.
- [37] C. Tedjokusumo and W. R. Murhadi, “Customer satisfaction as a mediator between service quality and customer loyalty: a case study of bank central asia,” *Jurnal Siasat Bisnis*, vol. 27, no. 2, pp. 156–170, 2023.
- [38] K. Bansal, “Customer experience: Creating value through transforming customer journeys,” *International Journal of Advances in Engineering and Management (IJAEM)*, vol. 5, no. 9, pp. 715–725, 2023.
- [39] C. Aksoy, “Digital business ecosystems: An environment of collaboration, innovation, and value creation in the digital age,” *Journal of business and trade*, vol. 4, no. 2, pp. 156–180, 2023.
- [40] M. A. Raji, H. B. Olodo, T. T. Oke, W. A. Addy, O. C. Ofodile, and A. T. Oyewole, “E-commerce and consumer behavior: A review of ai-powered personalization and market trends,” *GSC advanced research and reviews*, vol. 18, no. 3, pp. 066–077, 2024.
- [41] H. Yas, Z. Aldabbagh, A. A. Khalifa, A. Faghiri, A. A. Bawazir, and F. Shwedeh, “Role of artificial intelligence in the promotion of customer experiences: A legal administrative study and systematic review in the united arab emirates,” *Humanities*, vol. 6, no. 4, 2025.
- [42] M. Shoeb, M. Zillul *et al.*, “Artificial intelligence in digital marketing enhancing personalization and consumer engagement,” *Business & Social Sciences*, vol. 3, no. 1, pp. 1–9, 2025.
- [43] F. Shalihati, U. Sumarwan, H. Hartoyo, and L. N. Yuliati, “Mapping customer relationship management research in higher education: trends and future directions,” *Administrative Sciences*, vol. 15, no. 2, p. 68, 2025.
- [44] F. Sudirjo, “Marketing strategy in improving product competitiveness in the global market,” *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 63–69, 2023.
- [45] L. J. Garcia, G. B. Junior, and J. C. R. P. da Silva, “Innovation and marketing strategy: A systematic review,” *International Journal of Innovation: IJI Journal*, vol. 11, no. 3, p. 5, 2023.
- [46] M. T. Nuseir, G. A. El Refae, A. Aljumah, M. Alshurideh, S. Urabi, and B. A. Kurdi, “Digital marketing strategies and the impact on customer experience: A systematic review,” *The effect of information technology on business and marketing intelligence systems*, pp. 21–44, 2023.
- [47] S. Tuominen, H. Reijonen, G. Nagy, A. Buratti, and T. Laukkanen, “Customer-centric strategy driving innovativeness and business growth in international markets,” *International marketing review*, vol. 40, no. 3, pp. 479–496, 2023.
- [48] J. Rahman, A. Raihan, T. Tanchangya, and M. Ridwan, “Optimizing the digital marketing landscape: A comprehensive exploration of artificial intelligence (ai) technologies, applications, advantages, and challenges,” *Frontiers of finance*, vol. 2, no. 2, p. 6549, 2024.
- [49] Z. Aripin, E. Aristanto, and N. M. N. Pynatih, “Will doing a lot of promotions help increase image and consumer appeal?” *Journal of Economics, Accounting, Business, Management, Engineering and Society*, vol. 1, no. 1, pp. 12–24, 2023.
- [50] R. Varadarajan, “Resource-advantage theory, resource-based theory and market-based resources advantage: effect of marketing performance on customer information assets stock and information analysis capabilities,” *Journal of Marketing Management*, vol. 40, no. 13-14, pp. 1135–1154, 2024.
-