

## Maximizing Islamic Education Promotion through Data-Driven Social Media Marketing Strategies: An Islamic Higher Education Institution

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### Abstract:

This study shows that social media promotion, supported by data-driven marketing strategies, significantly enhances the effectiveness of Islamic education promotion by improving institutional visibility, community engagement, and prospective students' interest in enrollment. The main finding indicates that monitoring digital metrics such as likes, comments, shares, reach, impressions, and posting time provides a practical basis for more targeted and responsive promotional decision-making. The strength of this research lies in its contribution to extending data-driven marketing concepts into the context of Islamic education institutions with limited technological resources, thereby enriching the literature on digital education marketing. In practice, the study highlights that promotional effectiveness can be improved through continuous evaluation of audience behaviour and content performance across social media platforms. The implication is that Islamic educational institutions should strengthen digital literacy, optimize social media analytics, and develop consistent, data-based content strategies to enhance competitiveness and ensure sustainable institutional promotion in the digital era.

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DOI: <https://doi.org/10.61987/ifei.v1i3.000>

Cite in APA style as:

Holidi, M., Saputra, Y. I., Rahman, M., Firdausiyah, R. J., & Hasan, S. N. A. (2025). Maximizing Islamic Education Promotion through Data-Driven Social Media Marketing Strategies: Evidence from an Islamic Higher Education Institution. *Islamic Finance and Economic Insights*, 1(3), 123-135.

### Article History

Received: September 2025

Revised: October 2025

Accepted: December 2025

### Keywords

Data-Driven Marketing, Social Media, Islamic Education Promotion, Enrollment Interest.

## INTRODUCTION

The rapid expansion of digital communication technologies has transformed how educational institutions interact with prospective students and broader communities. Social media platforms have become essential channels for disseminating information, establishing institutional reputation, and fostering public engagement (Agustriana et al., 2024; Malhotra, 2022; Warburton, 2024). This development is particularly significant for Islamic higher education institutions, which are expected to promote educational values while remaining competitive in an



increasingly dynamic educational market. The growing reliance of younger generations on digital media for academic information suggests that conventional promotional approaches are becoming less effective. Institutions that fail to adopt data-driven digital marketing practices may struggle to attract potential applicants (Fan et al., 2024; Figueiredo et al., 2021; Onwude et al., 2024). Therefore, developing effective social media marketing strategies has become an important concern for ensuring the sustainability and visibility of Islamic higher education institutions.

Despite the widespread adoption of social media, many Islamic higher education institutions continue to encounter challenges in maximizing their promotional potential. Promotional activities are frequently conducted on intuition, periodic trends, or administrative preferences rather than on empirical analysis of audience behaviour and engagement patterns (Hofer et al., 2021; Ma et al., 2020). As a result, published content often receives limited interaction, low dissemination, and insufficient conversion into student interest in enrollment. The inconsistency of posting schedules, inadequate segmentation of target audiences, and lack of performance evaluation further reduce promotional effectiveness (Diriye et al., 2022; Farivar et al., 2022). In practice, institutional social media accounts tend to prioritize informational announcements instead of strategic content specifically designed to increase audience participation and strengthen institutional branding among prospective students and their families.

Previous studies have highlighted the significance of social media marketing in improving organizational performance and public engagement. Krishna et al. (2024) and Mariani et al. (2022) emphasized that digital marketing strategies supported by consumer analytics can enhance communication efficiency and audience targeting. Malodia et al. (2023), Yue et al. (2023), and Conte et al. (2023) argued that data-driven marketing enables organisations to optimise promotional decisions using measurable indicators. Sun et al. (2020) demonstrated that social media facilitates interactive relationships between institutions and stakeholders, while Rukhiran et al. (2023), Housawi et al. (2020), and Caya et al. (2023) reported that engagement metrics contribute substantially to brand awareness. Nevertheless, these studies mainly focus on commercial organizations and general educational institutions. Limited attention has been devoted to Islamic higher education contexts, particularly regarding the integration of social media analytics into institutional promotional decision-making processes.

This study addresses the existing research gap by examining how data-driven social media marketing strategies can be used to maximise educational promotion at an Islamic higher education institution. Unlike previous studies that predominantly investigate customer purchasing behaviour or general university branding, this research emphasises the use of social media performance indicators, including reach, impressions, engagement rates, audience demographics, and content preferences, as strategic tools for promotional planning (Hassan et al., 2025; Krishna et al., 2024; Saniuk et al., 2020). The study also considers the distinctive characteristics of Islamic educational institutions that simultaneously pursue academic excellence, religious values, and social missions. Understanding these dimensions is essential because

promotional effectiveness not only influences student recruitment but also affects institutional legitimacy, competitiveness, and long-term sustainability in the digital era.

Based on these considerations, several research questions emerge. First, how are social media performance data used to design promotional strategies within an Islamic higher education institution? Second, which social media indicators most significantly influence audience engagement and promotional effectiveness? Third, how can analytical insights from social media metrics be translated into practical marketing strategies of increase institutional visibility and attract prospective students? Addressing these questions is important because many Islamic higher education institutions maintain social media accounts and substantial digital resources. Nevertheless, they often lack systematic mechanisms to translate available data into evidence-based promotional policies and sustainable marketing initiatives.

This study argues that promotional effectiveness in Islamic higher education institutions can be substantially improved of implementing data-driven social media marketing strategies. By continuously analysing audience behaviour, engagement trends, and content performance, institutions are expected to identify communication patterns that resonate with prospective students and to optimise resource allocation for promotional activities. The originality of this research lies in integrating digital marketing analytics with the specific context of promoting Islamic higher education, an area that remains underexplored in the existing literature. The findings are anticipated to contribute theoretically by enriching discussions on educational digital marketing and practically by providing evidence-based recommendations for institutional managers seeking to strengthen promotional performance and competitive advantage.

## **RESEARCH METHOD**

This study employed a qualitative case study design to investigate the implementation of data-driven social media marketing strategies to promote Islamic education at MTs Nurul Wafa. A qualitative case study was selected because it enables researchers to explore a contemporary phenomenon within its real-life context and to gain a comprehensive understanding of the processes, experiences, and interactions involved in digital marketing practices in Islamic educational institutions (Kekeya, 2023). This approach is particularly appropriate for examining how social media analytics, digital content management, and promotional activities are integrated into institutional communication strategies, while simultaneously identifying factors that facilitate or hinder their effectiveness. The use of a case study also allows researchers to capture contextual dynamics and institutional characteristics that cannot be adequately explained through quantitative approaches alone.

The research was conducted at MTs Nurul Wafa, located in Demung Village, Besuki District, Situbondo Regency, Indonesia. This site was purposively selected because the madrasah has gradually integrated digital technologies into educational activities and institutional communication. However, the utilization of social media marketing and digital advertising to promote Islamic educational programs remains relatively underdeveloped and lacks systematic management. The institution is a suitable setting for examining the opportunities and challenges of implementing data-

driven marketing strategies in Islamic education. Moreover, the increasing reliance of prospective students and parents on online information sources underscores the need of examine how MTs Nurul Wafa manage digital promotional activities to enhance public awareness, engagement, and participation in Islamic education programs.

The participants involved in this study were selected through purposive sampling based on their direct involvement, experience, and knowledge regarding digital marketing activities and Islamic educational services at MTs Nurul Wafa (Cole, 2024; Lee et al., 2024). Informants consisted of madrasah managers, teachers, students, parents, and digital marketing practitioners. Their educational backgrounds and professional experiences were considered to ensure the credibility and richness of information obtained. The composition of research informants is presented in Table 1.

**Table 1. Research Informants and Selection Criteria**

<b>Informant Category</b>	<b>Number of Informants</b>	<b>Educational Background</b>	<b>Reason for Selection</b>
Head of Madrasah	1	Master's Degree in Islamic Education	Responsible for institutional policies and promotional decisions
Teachers	3	Bachelor's Degree in Education	Involved in learning activities and social media content creation
Students	6	Junior Secondary Education	Main target audience and active social media users
Parents	6	Senior High School to Bachelor's Degree	Decision-makers in school selection and recipients of promotional information
Digital Marketing Expert	1	Bachelor's/Master's Degree in Communication or Digital Marketing	Possesses expertise in planning and evaluating digital marketing strategies
<b>Total</b>	<b>17</b>	—	—

Data were collected using multiple techniques to ensure triangulation and enhance the trustworthiness of the research. Secondary data collection was undertaken by reviewing scientific articles, educational journals, institutional documents, and promotional materials related to digital marketing and Islamic education (Fadli, 2021). Direct observations were conducted to understand how learning activities and digital promotional practices were implemented within the madrasah environment. Semi-structured, in-depth interviews were conducted with administrators, teachers, and digital marketing experts to explore their perceptions, experiences, and challenges in using social media as a promotional medium. Questionnaires were distributed to students and parents to complement qualitative findings and capture their perceptions of the effectiveness of digital promotion. Furthermore, Focus Group Discussions (FGDs) involving students, parents, and educators were organised to gather collective insights into the impact of digital marketing on educational participation and institutional visibility.

The collected data were analysed following the interactive model proposed by Miles, Huberman, and Saldaña, consisting of data condensation, data reduction, data display, and conclusion drawing or verification (Soesana et al., 2023). During the condensation stage, researchers selected and simplified information relevant to the objectives of the study. Irrelevant data were excluded through a reduction process,

while meaningful information was retained for further interpretation. Subsequently, the selected data were systematically presented in narrative descriptions, matrices, and tables to facilitate understanding and comparison among participants' perspectives. Data verification was performed continuously throughout the analysis to ensure consistency, minimize researcher bias, and strengthen interpretative accuracy. Content analysis was employed to identify recurring themes emerging from interviews, questionnaires, and documentary evidence. In addition, discourse analysis was utilized to examine the language, messages, and communication patterns used in social media promotional content. In contrast, interpretive analysis helped explain participants' experiences and perceptions of digital marketing's role of promoting Islamic education. To ensure the trustworthiness of the findings, credibility was established through source and method triangulation, member checking, prolonged engagement, and peer debriefing. In contrast, dependability and confirmability were enhanced by maintaining detailed research documentation and audit trails throughout the study.

## RESULT AND DISCUSSION

### Result

The findings of this study reveal how MT Nurul Wafa utilises social media and digital marketing practices to promote Islamic education. The results encompass current promotional activities, the application of data-driven marketing strategies, and the influence of digital advertising on prospective students' enrollment interest. These findings provide insights into the evolving role of digital platforms in strengthening educational promotion and community engagement.

### Data-Driven Marketing Strategies for Islamic Education Promotion

Data-driven marketing strategies for the promotion of Islamic education refer to the systematic utilization of digital data and social media performance metrics to support promotional planning, content management, and communication activities at MTs Nurul Wafa. In the field, this strategy was operationalized through routine monitoring of audience responses, evaluation of content performance, scheduling promotional uploads, and adjusting communication materials based on engagement trends observed on digital platforms. Rather than relying solely on conventional promotional practices, the madrasah incorporated digital indicators to determine the type of content to disseminate, the timing of publication, and the selection of communication channels most effective for reaching prospective students and parents.

**Table 2. Observed Data-Driven Marketing Practices at MTs Nurul Wafa**

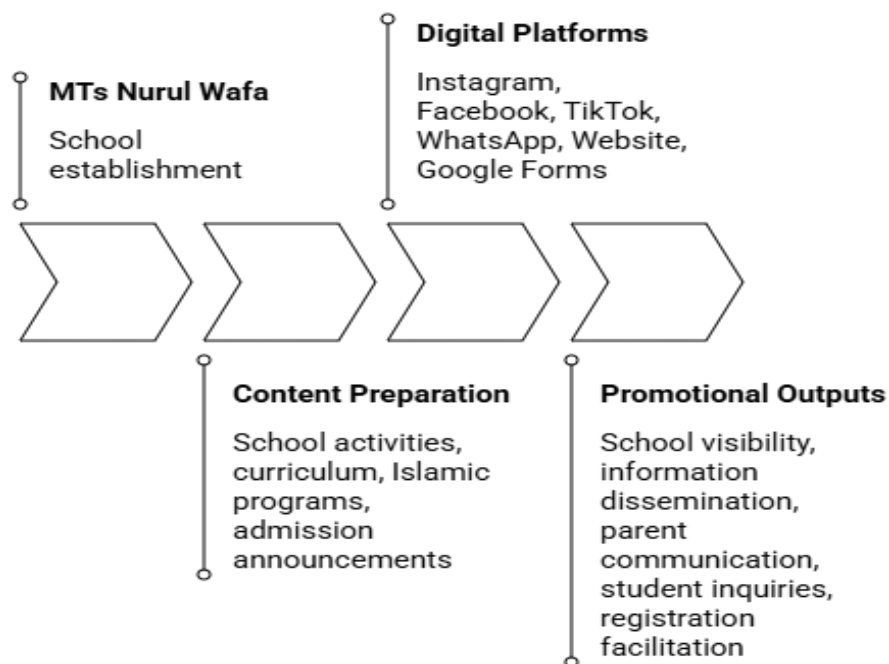
Observation Findings	Indicators	
Monitoring the number of likes, comments, shares, and views on social media posts	Audience analysis	engagement
Reviewing the reach and impressions of promotional content	Content evaluation	performance
Scheduling uploads according to periods with higher audience activity	Posting time optimization	
Selecting frequently viewed school activities for future promotional materials	Content identification	preference
Coordinating promotional activities among administrators and teachers	Promotional collaboration	team

The findings presented in Table 2 indicate that MT Nurul Wafa has gradually implemented several data-driven marketing practices in its promotional activities. The observed practices demonstrate that promotional decisions are increasingly influenced by information generated through social media interactions and audience behaviour. Researchers observed that administrators periodically reviewed engagement indicators, including the number of reactions and comments received from followers, to determine which content attracted greater public attention. Promotional materials featuring religious celebrations, extracurricular programs, and student achievements were more frequently reposted because they generated higher interaction rates. In essence, these practices suggest that the madrasah has begun utilising digital evidence to support promotional decision-making. However, the application of analytical tools remains relatively simple and adaptive to institutional capacities.

The available data reveal a consistent pattern: digital marketing activities at MTs Nurul Wafa are characterised by continuous observation, evaluation, and adjustment. Engagement metrics are used to understand audience preferences, while content planning and publication schedules are adjusted based on previous promotional outcomes. Feedback obtained through WhatsApp inquiries and social media interactions also serves as an additional source of information for improving subsequent promotional campaigns. This pattern indicates that promotional activities are no longer conducted solely on intuition or administrative considerations but increasingly rely on observable digital indicators, contributing to more targeted, efficient, and responsive Islamic education promotion practices.

### **Current Social Media Promotion Practices**

Current social media promotion practices encompass various promotional activities undertaken by MTs Nurul Wafa on digital platforms to disseminate information about Islamic educational services, strengthen institutional visibility, and facilitate communication with prospective students and parents. In the field, these practices were identified through the utilization of social networking sites, instant messaging applications, and online registration tools. Promotional activities include publishing information on school programs, documenting religious and extracurricular activities, sharing admission announcements, and providing access to registration services. The operational meaning of this finding indicates that social media promotion practices at MTs Nurul Wafa are not merely intended to distribute information but also to serve as communication channels connecting the madrasah with broader communities and to support the dissemination of Islamic educational values.



**Figure 1. Maximising Registration Through Multiplatform Marketing**

Observations on Figure 1, conducted during the research period, showed that MTs Nurul Wafa actively utilized several digital platforms to promote its educational services. Instagram, Facebook, and TikTok accounts were used to publish school events, curriculum information, and Islamic learning activities in visual formats. Researchers also observed that WhatsApp served as a medium for direct communication between the institution and parents, while Google Forms simplified the registration process for prospective students. Promotional materials were uploaded regularly and displayed attractive designs accompanied by concise information. Based on these observations, researchers interpreted that social media had become an integral component of institutional promotion because it enabled the madrasah to reach wider audiences more efficiently than conventional promotional approaches.

The findings indicate that social media promotion practices at MTs Nurul Wafa are implemented through the integration of multiple digital channels that complement one another. Social networking platforms primarily function to increase institutional exposure and disseminate information publicly, whereas WhatsApp and Google Forms facilitate more personalized interactions and administrative services. In other words, promotional activities conducted by the madrasah are no longer limited to face-to-face dissemination or printed brochures but have gradually shifted toward digital communication practices. This transformation enables prospective students and parents to access educational information more easily while strengthening the presence of Islamic education in digital environments.

The available data demonstrate a consistent pattern in which different digital platforms are employed according to their respective functions and communication objectives. Social media applications such as Instagram, Facebook, and TikTok are mainly used to attract public attention and showcase institutional activities. Conversely, WhatsApp and Google Forms are utilized to provide direct responses, deliver detailed information, and support online registration services. The combination of these platforms creates a promotional ecosystem that enables MTs Nurul Wafa to maintain

continuous interactions with communities and extend its promotional coverage beyond the immediate geographical area of the madrasah.

### **Advertising Effects on Enrollment Interest**

Digital advertising effects on enrollment interest refer to the influence of online promotional activities conducted by MTs Nurul Wafa in encouraging prospective students and their parents to seek information, communicate with the institution, and develop intentions to enrol. In the field, this phenomenon was identified through increased interactions on social media platforms, growing inquiries through WhatsApp, and heightened participation in school promotional events. Enrollment interest was operationally defined as a series of behavioural responses exhibited by community members after exposure to digital advertisements, including following institutional social media accounts, requesting admission information, sharing promotional content with relatives, and expressing willingness to register at the madrasah. These responses indicate that digital advertising has become an important medium for introducing educational services and attracting public attention toward Islamic education programs.

Interviews with institutional stakeholders revealed that digital advertising increased public curiosity about the madrasah. The head of the madrasah explained, "Since we started promoting activities through Instagram and WhatsApp, more parents have contacted us to ask about registration procedures and tuition fees." A teacher responsible for social media management stated, "Many prospective students first know our school from social media posts, and several families visit the school after seeing our promotional videos online." Based on these statements, the researcher interprets digital advertising as not only an information-dissemination channel but also an effective bridge for communication between the institution and the community. The accessibility of online platforms enables parents and students to obtain educational information more easily and quickly.

Additional perspectives were obtained from parents and students who experienced direct exposure to promotional content. One parent mentioned, "I often receive information about school activities through WhatsApp groups, and it helped me understand the programs offered by MTs Nurul Wafa before deciding to register my child." A student also stated, "I became interested in studying here after watching videos of extracurricular activities uploaded on Instagram because the school looked active and enjoyable." These interview findings suggest that visual and interactive promotional content influences perceptions and strengthens confidence in selecting educational institutions. The researcher interprets that attractive digital advertisements can shape positive impressions among prospective students and parents, thereby encouraging stronger intentions to participate in the enrollment process.

Observations conducted during the admission period showed that the number of messages received through the official WhatsApp account increased noticeably following the publication of promotional posters and activity videos on social media. Researchers also observed that several parents visiting the school office referred to information previously accessed through Instagram and WhatsApp. In addition, social media accounts displayed growing engagement in the form of comments, content sharing, and direct messages requesting admission details. These observations indicate

that digital advertising generated meaningful interactions between the institution and the public. In other words, online promotional activities not only expanded the reach of information but also stimulated community engagement and strengthened public interest in enrolling children at MTs Nurul Wafa.

## Discussion

The findings demonstrate that MT Nurul Wafa has integrated social media into its promotional activities by utilising Instagram, Facebook, TikTok, WhatsApp, and Google Forms to disseminate information and facilitate communication with prospective students and parents. These findings align with previous studies emphasising that social media is an effective medium for expanding institutional visibility and maintaining interactive communication with stakeholders (Ball et al., 2023; Herlina, 2024; Paliwoda et al., 2020). Consistent with existing literature, the present study confirms that digital platforms have gradually replaced traditional promotional methods, as they enable educational institutions to reach wider audiences more efficiently. However, unlike many studies that focus on universities and commercial organisations, this research highlights the adaptability of social media promotion in the context of Islamic secondary education institutions, which are characterized by relatively limited technological resources.

The implementation of data-driven marketing strategies observed at MTs Nurul Wafa is consistent with the notion that measurable indicators and audience behaviour should inform promotional decisions. Previous studies have suggested that engagement metrics, content performance, and audience preferences provide valuable insights for improving marketing effectiveness (Hödl, 2024; Lamrhari et al., 2022). The present findings support these arguments by demonstrating that promotional activities are increasingly adjusted in response to reactions, comments, content reach, and interaction trends from social media platforms. Nevertheless, the analytical practices identified in this study remain relatively simple compared with sophisticated digital analytics systems employed by larger institutions (Camilleri, 2021; Hlee et al., 2023). This difference indicates that data-driven marketing can still be implemented incrementally, in line with institutional capacities and available human resources.

The findings regarding advertising effects on enrollment interest also correspond with earlier investigations indicating that online promotional activities influence public perceptions and educational decision-making processes. Increased inquiries via WhatsApp, higher engagement rates, and growing interest among prospective students suggest that digital advertising positively contributes to institutional attractiveness (Armutcu et al., 2023; Kyrychok, 2021). In contrast to studies that primarily evaluate consumer purchasing intentions, this study demonstrates that promotional content in Islamic educational institutions affects parents' confidence and students' willingness to pursue religious-based education. Attractive visual presentations, activity documentation, and timely information dissemination appear to strengthen positive impressions and encourage communities to seek further information regarding educational services (Alexander et al., 2021; Bera et al., 2022).

From a theoretical perspective, this study contributes to the growing discourse on digital marketing within Islamic education by extending the application of social media marketing concepts into the context of madrasah promotion. The findings

support the argument that digital promotion should not merely focus on information dissemination but also on systematic observation, evaluation, and adjustment processes informed by audience responses. This perspective enriches discussions concerning educational marketing by emphasising that Islamic educational institutions can adopt evidence-based promotional practices while preserving their religious identity and educational mission. Consequently, the study broadens the understanding of how digital communication theories operate within faith-based educational environments.

In practice, the findings suggest that Islamic educational institutions should strengthen their digital competencies and optimise the use of available social media features to improve promotional effectiveness. Administrators may benefit from periodically evaluating engagement indicators, identifying content preferences, and coordinating promotional activities among educators and institutional managers. Developing attractive multimedia content and maintaining consistent communication via instant messaging applications may also increase public participation and interest in enrollment. These practical efforts are expected to help Islamic educational institutions remain competitive, enhance public trust, and sustain their presence within increasingly digitalised educational landscapes.

## **CONCLUSION**

The findings of this study demonstrate that social media promotion, supported by data-driven marketing practices, enhances the visibility of Islamic educational institutions, strengthens community engagement, and stimulates prospective students' interest in enrolling. The most important lesson gained from this research is that promotional effectiveness can be improved through continuous monitoring of audience behaviour, content performance, and communication patterns across multiple digital platforms. This study contributes to the development of educational marketing literature by extending data-driven marketing concepts into the context of Islamic education, particularly within institutions with limited technological resources. Nevertheless, this research was confined to a single case study, which restricts the generalizability of the findings. Future studies are recommended to involve multiple Islamic educational institutions, employ comparative designs, and incorporate advanced social media analytics to provide broader insights into the effectiveness of digital promotion.

## **ACKNOWLEDGMENT**

The author would like to express sincere gratitude to all participants and contributors who supported this research, including institutional administrators, teachers, students, parents, and experts. Special appreciation is also extended to those who provided guidance, insights, and assistance throughout the research process, enabling the successful completion of this study.

## REFERENCES

- Agustriana, R., & Sugiarti, D. (2024). The Phenomenon of Online Gambling Among Generation Z: The Influence of Mentality and Macroeconomic Implications From an Islamic Perspective. *Proceedings of the International Students Conference of Economics and Business Excellence*, 1(1), 31–39. <https://doi.org/10.33830/iscebe.v1i1.3886>
- Alexander, N., Brenman, D., Wolter, J., Scherer, W., & Valeiras, J. (2021). The Future of Livestreaming: Strategy and Predictive Analysis for Future Operations of Facebook Live. In *2021, the IEEE Systems and Information Engineering Design Symposium, SIEDS 2021*. <https://doi.org/10.1109/SIEDS52267.2021.9483785>
- Armutcu, B., Tan, A., Amponsah, M., Parida, S., & Ramkissoon, H. (2023). Tourist Behaviour: The Role of Digital Marketing and Social Media. *Acta Psychologica*, 240. <https://doi.org/10.1016/j.actpsy.2023.104025>
- Ball, B., Hoefler, S., Brooks, T., Munoz, G., Pacheco, E., Poland, C., Salmeron, C., & Zelaya, A. B. (2023). Innovation in Sexuality and Relationship Education in Child Welfare: Shifting Toward a Focus on Ongoing Conversations, Connection, and Consent. *Prevention Science*, 24, 163–173. <https://doi.org/10.1007/s11121-022-01476-z>
- Bera, A., & Kumar (2022). Applications of Magnetic Nanoparticles in Thermal Enhanced Oil Recovery. In *Fundamentals and Industrial Applications of Magnetic Nanoparticles* (pp. 527–553). <https://doi.org/10.1016/B978-0-12-822819-7.00005-3>
- Camilleri, M. A. (2021). Evaluating Service Quality and Performance of Higher Education Institutions: A Systematic Review and a Post-COVID-19 Outlook. *International Journal of Quality and Service Sciences*, 13(2), 268–281. <https://doi.org/10.1108/IJQSS-03-2020-0034>
- Caya, O., & Mosconi, E. (2023). Citizen Behaviours, Enterprise Social Media and Firm Performance. *Information Technology and People*, 36(3), 1298–1325. <https://doi.org/10.1108/ITP-07-2020-0514>
- Cole, R. (2024). Inter-Rater Reliability Methods in Qualitative Case Study Research. *Sociological Methods and Research*, 53(4), 1944–1975. <https://doi.org/10.1177/00491241231156971>
- Conte, F., & Siano, A. (2023). Data-driven Human Resources and Data-Driven Talent Management in Internal and Recruitment Communication Strategies: An Empirical Survey on Italian Firms and Insights for the European Context. *Corporate Communications*, 28(4), 618–637. <https://doi.org/10.1108/CCIJ-02-2022-0012>
- Diriye, A. W., Chong, R., & Abdi, A. M. (2022). The Value of Cultural Worldviews and Message Framing for the Acceptability of Sustainable Land-Use Zoning Policies in Post-Conflict Somalia. *Journal of Environmental Planning and Management*, 65(14), 2587–2608. <https://doi.org/10.1080/09640568.2021.1974360>
- Fadli, M. (2021). Understanding Qualitative Research Method Design. *Humanika: Kajian Ilmiah Mata Kuliah Umum*, 21(1), 33–54. <https://doi.org/10.21831/hum.v21i1>
- Fan, W., & Li, Z. (2024). Evaluation of Comprehensive Early Warning for Higher Education Institutions' Cloud Model of Simulated Enterprise Management Cockpit. *PLoS ONE*, 19(6 June). <https://doi.org/10.1371/journal.pone.0305652>

- Farivar, S., & Wang, F. (2022). Effective Influencer Marketing: A Social Identity Perspective. *Journal of Retailing and Consumer Services*, 67. <https://doi.org/10.1016/j.jretconser.2022.103026>
- Figueiredo, F., Gonçalves, M. J. A., & Teixeira, S. (2021). Information Technology Adoption on Digital Marketing: A Literature Review. In *Informatics* (Vol. 8, Issue 4). <https://doi.org/10.3390/informatics8040074>
- Hassan, I. S., & Fernando, Y. (2025). Integrating Servitisation into the Halal Supply Chain: A Roadmap for Sustainable Business Growth. *Journal of Islamic Marketing*, 16(3), 906–928. <https://doi.org/10.1108/JIMA-01-2024-0028>
- Herlina, A. (2024). Mindful Messaging: Public Relations (PR) Strategies in Schools By Using the Hierarchy of Effects. *Managere: Indonesian Journal of Educational Management*, 6(1), 98–110. <https://doi.org/10.52627/managere.v6i1.429>
- Hlee, S., Park, J., Park, H., Koo, C., & Chang, Y. (2023). Understanding Customer's Meaningful Engagement with AI-Powered Service Robots. *Information Technology and People*, 36(3), 1020–1047. <https://doi.org/10.1108/ITP-10-2020-0740>
- Hödl, T. (2024). Social Media Feedback Dynamics: The Influence of Community and Technology on Content Creators. In the *45th International Conference on Information Systems, ICIS 2024*.
- Hofer, R., Wilkin, M. K., Mayers, E., Wolford, B. K., Butler, B., Beavers, B., & Zubieta, A. C. (2021). Development and Evaluation of a Research-Driven Health Communication Campaign to Increase Fruit and Vegetable Consumption Among SNAP-Eligible Ohio Adults. *Social Marketing Quarterly*, 27(4), 267–283. <https://doi.org/10.1177/15245004211042413>
- Housawi, A., Moreba, Y. H. B., Abuznadah, W., & Alhaidar, S. A. (2020). Evaluation of Key Performance Indicators (KPIs) for Sustainable Postgraduate Medical Training: An Opportunity for Implementing an Innovative Approach to Advance the Quality of Training Programs at the Saudi Commission for Health Specialities (SCFHS). *Sustainability (Switzerland)*, 12(19), 1–37. <https://doi.org/10.3390/su12198030>
- Kekeya, J. (2023). Qualitative Case Study Research Design: The Commonalities and Differences between Collective, Intrinsic, and Instrumental Case Studies. *Contemporary PNG Studies*, 36(2008), 29–30. <https://search.informit.org/doi/10.3316/informit.356219476950585>
- Krishna, S. H., Kaur, K., Rajalakshmi, B., Lakhanpal, S., Sule, B., & Sumalatha, I. (2024). Competitive Edge Using Big Data Analytics to Improve Customer Relationship Management. In *Proceedings of International Conference on Communication, Computer Sciences and Engineering, IC3SE 2024* (pp. 1553–1557). <https://doi.org/10.1109/IC3SE62002.2024.10593152>
- Kyrychok, A. (2021). Special Aspects of Effective PR Professionals' Training in the Post-Truth Era. *International Journal of Instruction*, 14(2), 45–66. <https://doi.org/10.29333/iji.2021.1424a>
- Lamrhari, S., Ghazi, H. El, Oubrich, M., & Faker, A. El. (2022). A Social CRM Analytic Framework for Improving Customer Retention, Acquisition, and Conversion. *Technological Forecasting and Social Change*, 174. <https://doi.org/10.1016/j.techfore.2021.121275>

- Lee, P. S., Liu, M. J., Ma, L. Y., & Pan, C. H. (2024). A Qualitative Research Approach to Collect Insights of College Students Engaging in A University Social Responsibility Project with Augmented Reality. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics): Vol. 14690 LNCS* (pp. 224–237). [https://doi.org/10.1007/978-3-031-60114-9\\_16](https://doi.org/10.1007/978-3-031-60114-9_16)
- Ma, L., & Sun, B. (2020). Machine Learning and AI in Marketing – Connecting Computing Power to Human Insights. *International Journal of Research in Marketing*, 37(3), 481–504. <https://doi.org/10.1016/j.ijresmar.2020.04.005>
- Malhotra, S. (2022). The YouTube Companion to Film Education. *Studies in Media and Communication*, 10(2), 320–334. <https://doi.org/10.11114/smc.v10i2.5748>
- Malodia, S., Ferraris, A., Sakashita, M., Dhir, A., & Gavurova, B. (2023). Can Alexa Serve Customers Better? AI-Driven Voice Assistant Service Interactions. *Journal of Services Marketing*, 37(1), 25–39. <https://doi.org/10.1108/JSM-12-2021-0488>
- Mariani, M. M., Perez-Vega, R., & Wirtz, J. (2022). AI in Marketing, Consumer Research and Psychology: A Systematic Literature Review and Research Agenda. In *Psychology and Marketing* (Vol. 39, Issue 4, pp. 755–776). <https://doi.org/10.1002/mar.21619>
- Onwude, D., Cronje, P., North, J., & Defraeye, T. (2024). Digital Replica to Unveil the Impact of Growing Conditions on Orange Postharvest Quality. *Scientific Reports*, 14(1). <https://doi.org/10.1038/s41598-024-65285-w>
- Paliwoda-Matiolanska, A., Smolak-Lozano, E., & Nakayama, A. (2020). Corporate Image or Social Engagement: Twitter Discourse on Corporate Social Responsibility (CSR) in Public Relations Strategies in the Energy Sector. *Profesional de la Información*, 29(3), 1–16. <https://doi.org/10.3145/epi.2020.may.33>
- Rukhiran, M., Wong-In, S., & Netinant, P. (2023). IoT-Based Biometric Recognition Systems in Education for Identity Verification Services: Quality Assessment Approach. *IEEE Access*, 11, 22767–22787. <https://doi.org/10.1109/ACCESS.2023.3253024>
- Saniuk, S., Grabowska, S., & Gajdzik, B. Z. (2020). Personalization of Products in the Industry 4.0 Concept and Its Impact on Achieving a Higher Level of Sustainable Consumption. *Energies*, 13(22). <https://doi.org/10.3390/en13225895>
- Soesana, A., Subakti, H., Salamun, S., Tasrim, I. W., Karwanto, K., Falani, I., Bukidz, D. P., & Pasaribu, A. N. (2023). *Qualitative Research Methodology*. *International Journal of Instruction*, 14(2), 45–66. <https://doi.org/10.29333/iji.2021.1424a>
- Warburton, E. C. (2024). TikTok Challenge: Dance Education Futures in the Creator Economy. *Arts Education Policy Review*, 125(4), 430–440. <https://doi.org/10.1080/10632913.2022.2095068>
- Yue, X., Huo, B., & Ye, Y. (2023). The Impact of Coercive Pressure and Ethical Responsibility on Cross-Functional Green Management and Firm Performance. *Journal of Business and Industrial Marketing*, 38(5), 1015–1028. <https://doi.org/10.1108/JBIM-09-2021-0446>