

Digital Marketing Strategy in Digital Transformation towards Industry 5.0: A Sustainable Development Goals (SDGs) Perspective

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ABSTRACT

This study explores the role of digital marketing strategies in supporting Sustainable Development Goals (SDGs) 8 (Decent Work and Economic Growth) and 9 (Industry, Innovation, and Infrastructure) within the industry 5.0 framework. Using a qualitative approach with semi-structured interviews involving 10 informants from MSMEs, practitioners, policymakers, and academics, data were collected through interviews, digital observations, and documentation. Thematic analysis using NVivo revealed that digital marketing fosters job creation, technology adoption (AI, CRM, landing pages), and sustainable innovation, while challenges remain in digital literacy and technological access. The study proposes an integrative framework to guide inclusive and sustainable digital marketing strategies that align with Industry 5.0 and the SDGs.

INTRODUCTION

The convergence of Industry 5.0 a paradigm emphasizing human centricity, sustainability, and resilience with the global mandate of the Sustainable Development Goals (SDGs) presents a profound challenge and opportunity for modern enterprises. While digital transformation accelerates technological capabilities, a critical gap persists in understanding how these advancements can be strategically harnessed to foster inclusive economic growth and sustainable industrial innovation. This research addresses this disconnect by exploring the pivotal role of digital marketing, not merely as a commercial tool, but as a strategic driver for achieving SDGs 8 (Decent Work and Economic Growth) and SDGs 9 (Industry, Innovation, and Infrastructure). It investigates how small and medium sized enterprises (MSMEs), in particular, can leverage digital marketing strategies to navigate this new industrial era responsibly and effectively.

Successful digital transformation in the contemporary era refers not only to efficiency but also to structural changes focused on inclusive and sustainable economic development, as mandated by the SDGs. Modern consumers, especially younger generations, increasingly demand transparency and accountability from brands, choosing products and services from companies that demonstrate a commitment to sustainable practices (Deloitte, 2023). Therefore, understanding how digital marketing strategies can synergistically support the transition to a sustainable Industry 5.0 and contribute to the SDGs is a strategic imperative for the future survival and success of businesses.

Despite a rapidly growing literature on digital transformation, Industry 5.0, and the SDGs, significant gaps remain in understanding their specific interconnections, particularly the role of digital marketing strategies. Existing research tends to address these aspects separately. For example, studies provide comprehensive analyses of how digital technologies can support the achievement of the SDGs across various sectors but do not specifically elaborate on the role of digital marketing strategies in the context of Industry 5.0 (Varriale et al., 2024). Similarly, bibliometric analyses of Industry 5.0 highlight the shift towards sustainability and human-machine collaboration but do not explicitly link these to digital marketing strategies or their practical implications for the SDGs (Rejeb et al., 2025). Other studies identify a lack of roadmaps integrating sustainability into the digital transformation process for SMEs but focus more on digital transformation in general than on digital marketing strategies specifically (Pinto Mick et al., 2024; Asbeetah et al., 2025).

The novelty of this research lies in its holistic integration of these interconnected domains. Unlike previous studies, this research explicitly analyzes how digital marketing strategies can be designed and implemented to synergistically support the transition towards a human centered and sustainable Industry 5.0, while directly supporting the SDGs agenda. This research aims to develop an integrative framework that is accessible and actionable for resource-constrained organizations like MSMEs, linking specific digital marketing tactics to measurable SDGs 8 and SDGs 9 outcomes. This integrated approach is expected to fill existing literature gaps and make significant contributions to

theory and practice in the fields of digital marketing, industrial transformation, and sustainability. Based on the identified research gaps, the main objective of this research is to analyze and formulate effective digital marketing strategies in the context of digital transformation towards Industry 5.0, with an explicit focus on their contribution to the Sustainable Development Goals (SDGs).

LITERATURE REVIEW

The literature review in this study aims to examine the latest developments regarding digital marketing strategies in the context of digital transformation towards Industry 5.0, with a particular focus on its contribution to the achievement of SDGs 8 and SDGs 9. This section also aims to identify knowledge gaps that will be addressed in this study.

Digital Marketing Strategy and Economic Growth (SDGs 8): Digital marketing strategies are increasingly becoming a key driver of economic growth. Research by Virani (2024) highlights that leveraging digital platforms such as social media and online advertising can increase brand visibility, customer engagement, and create new job opportunities in the digital sector, particularly for the younger generation. These findings reinforce the crucial role of digital marketing in supporting the achievement of SDGs 8. However, the study also revealed that digital strategies tend to be more effective among younger age groups, highlighting the challenge of equitable benefit sharing. While studies show that MSMEs use digital platforms for sustainability communication (Siti Rahayuningsih et al., 2024), they often do not explore the significant barriers, such as a lack of digital literacy or budget, that prevent widespread and effective adoption.

Sustainable Industrial Digitalization and Innovation (SDGs 9): Sustainable industrialization, a cornerstone of SDGs 9, is increasingly driven by digitalization. Research demonstrates how UK SMEs implement IoT and AI to enhance production efficiency (Khan, 2024), while studies on Turkish banks show how green financing supports sustainable infrastructure projects (Kazan et al., 2025). However, these studies often overlook the indispensable role of digital marketing in translating technological capacity into market reality. Marketing serves as the critical conduit through which these innovations are communicated to stakeholders, new markets for sustainable technologies are cultivated, and vital customer feedback is channeled back to inform further innovation. Without effective digital marketing strategies to promote these initiatives and build consumer trust, the potential of such technological advancements to contribute to SDGs 9 remains limited.

Although the adoption of digital marketing strategies is increasingly widespread and has been widely studied in the context of digital transformation, particularly in supporting economic growth and industrial innovation, the academic literature still reveals several significant gaps that have not been systematically addressed. These gaps serve as a key starting point for this research, given the urgency of integrating digital business strategies with the sustainable development agenda within the industry 5.0 framework, which places people and sustainability at the center of innovation.

There is a lack of explicit integration between digital marketing strategies and the simultaneous achievement of SDGs 8 and SDGs 9. Most existing research tends to focus on a single aspect, hindering the development of evidence-based policies and practices. Furthermore, studies presenting strategic frameworks that can be practically adopted by businesses and policy makers are still limited. Many MSMEs and policymakers desperately need applicable strategic guidance for implementing digital marketing as a tool to address employment challenges, increase productivity, and strengthen digital infrastructure networks (Ren and Jirawuttinunt, 2025).

METHODOLOGY

This research method uses a descriptive qualitative approach with a case study design to explore how digital marketing strategies play a role in strengthening digital transformation towards Industry 5.0 and encouraging the achievement of SDGs 8 and SDGs 9. The main focus is to understand the experiences, strategies, and challenges faced by industry players in integrating marketing digitalization with the sustainable development agenda.

Design and Justification of Method

A qualitative approach was chosen because it allows for the flexibility to capture subjective meanings, strategic narratives, and the dynamics of change occurring at the organizational or business level. This method is also suitable for analyzing informal policies, community based initiatives, and digital communication strategies that cannot be measured solely numerically. For example, a study by (Dedi et al., 2024) shows that digital marketing has a significant influence on MSMEs performance, which directly supports local economic productivity. This aligns with the research objective of understanding how digital strategies drive growth.

There's also SDGs 8.3 that is one of the 12 categories in SDGs 8 (Decent Work and Economic Growth) for global uses which represent that Promote policies to support job creation and growing enterprises as we can see in Figure 1.

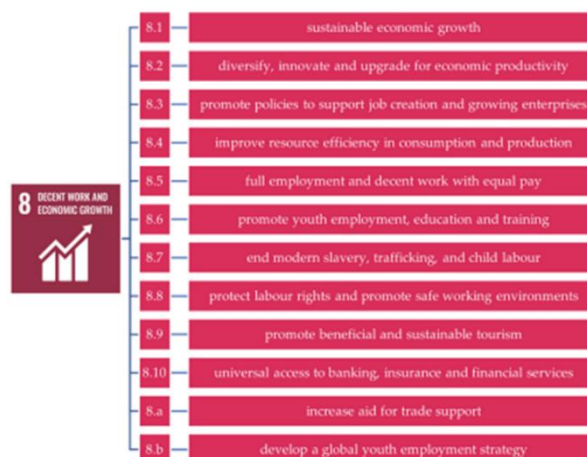


Figure 1. Sustainable Development Goal 8 targets

(Source : <https://sdgs.un.org/goals/goal8>)

Research Location and Subjects

This research was conducted in major cities in Indonesia with high levels of digital transformation adoption, particularly in the Micro, Small, and Medium Enterprises (MSMEs) sector and technology based creative industries. The research subjects comprised three main groups: MSMEs operating in the fashion, culinary, and ecotourism sectors; mid-sized companies in the digital creative sector; and practitioners and policymakers, including marketing consultants, MSMEs facilitators, and academics. Ten key informants were purposively selected based on their active role and experience in implementing or analyzing digital marketing strategies. These informants included business owners, marketing managers, field facilitators, and academics from various educational institutions.

This purposive location selection also considered the representation of strategic sectors directly related to the Sustainable Development Goals (SDGs), particularly SDGs 8, which focuses on decent work and economic growth, and SDGs 9, which emphasizes industrial development, innovation, and infrastructure. Thus, the megacity context provides a relevant empirical framework for exploring the integration of digital marketing strategies and the sustainability agenda within the Industry 5.0 framework.

The research subjects comprised three main groups. The first group comprised MSMEs operating in the fashion, culinary, and ecotourism sectors. These sectors are known to be among the quickest to adapt to digital technology, particularly in terms of online product marketing and sales. Fashion MSMEs have widely adopted visual marketing on platforms like Instagram and TikTok, developed online stores on e-commerce platforms, and built community based brands. Meanwhile, culinary MSMEs have strengthened their marketing with digital delivery services, customer loyalty campaigns through apps, and collaborations with food influencers. In the ecotourism sector, businesses utilize websites, online bookings, and story-based experiences to promote local destinations and activities, often with a sustainability narrative aligned with the SDGs.

The second group comprises mid sized companies in the digital creative sector. These companies include marketing agencies, software developers, digital content studios, and digital transformation consultants. This group plays a strategic role as technical and creative advisors to MSMEs and other institutions in developing digital strategies. Their practices include the use of Customer Relationship Management (CRM), marketing automation, and Artificial Intelligence (AI) to help clients design personalized, efficient, and measurable campaigns. The experience and innovations developed by this group are crucial in understanding how digital marketing strategies can be directly linked to strengthening industrial innovation and efficiency, as outlined in SDGs 9.

The third group comprised practitioners and policymakers, including marketing consultants, MSMEs facilitators, relevant agency officials, and academics involved in digital transformation mentoring and research programs. Their involvement enabled exploration of the policy context and institutional support that influence digitalization success, including digital literacy training,

the provision of local digital platforms, and access to technology based financing. Ten key informants were purposively selected based on their active role and experience in implementing or analyzing digital marketing strategies in the context of MSMEs and the creative industry. These informants included business owners, marketing managers, field facilitators, and academics from various educational institutions. Data collection involved in depth semi structured interviews, direct observation of digital activities, and analysis of promotional documents and online publications.

Data collection technique

In this qualitative research, data collection was conducted through three complementary primary methods: in depth interviews, field and digital observations, and the collection of relevant documents. In depth interviews were conducted with 10 key informants who are actively involved in the design and implementation of digital marketing strategies in their respective sectors, as shown in Table 1. The informants were selected purposively, taking into account criteria such as a minimum of two years of experience in digital transformation processes and direct involvement in digital marketing practices. A relevant example is also seen in a study by (Febdilan, Hali, and Lantang 2024), which examined digital marketing strategies in the homestay sector in Kuta, Lombok. The study confirmed that digital marketing not only increases homestay occupancy but also empowers homestay managers economically, aligning with SDGs 8.

Table 1. Profile of Informants

Informant Code	Position or Role	Sector	Digital Experience	SDGs Linkages
KI-01	Marketing Manager	Manufacturing (furniture)	6 years	SDGs 9
KI-02	MSME Owner	Muslim Fashion	4 years	SDGs 8
KI-03	Digital Consultant	SME Transformation	8 year	SDGs 8 and SDGs 9
KI-04	Head of IT Division	Digital agribusiness	5 year	SDGs 9
KI-05	Founder Start-up	EduTech	7 year	SDGs 8
KI-06	CSR Manager	State owned companies	9 year	SDGs 8
KI-07	Ecotourism Manager	Mangrove Ecotourism	6 year	SDGs 8 and SDGs 9
KI-08	Digital Strategist	Local Marketplace	5 year	SDGs 9
KI-09	Local Coffee Owner	F&B MSMEs	4 year	SDGs 8
KI-10	Lecturers and Researchers	Digital Marketing	11 year	SDGs 8 and SDGs 9

Field and digital observations in this study were conducted directly and indirectly on digital marketing activities carried out by the companies and institutions where the informants work. Observations were aimed at understanding more contextually how digital marketing strategies are implemented in practice, as well as how their integration supports sustainable development goals, particularly SDGs 8 and SDGs 9. The primary focus of observations included the types and diversity of digital platforms used, such as Instagram, Facebook, TikTok, YouTube, Shopee, Tokopedia, and the companies official websites.

Furthermore, researchers also examined the types of content produced and published, ranging from product promotions and customer testimonials to local value based storytelling, to education on sustainability and the SDGs. Consumer interaction was a key aspect of attention, including the number of likes, comments, engagement rate, and the speed and quality of digital service responses. This helped measure the effectiveness of digital marketing in real time.

Observations were not limited to digital spaces; they also included offline activities such as participation in bazaars, holding digital marketing training, and collaborating with local communities, all documented and shared through digital channels. This observational approach provides a comprehensive overview of the integration of digital practices into adaptive marketing strategies, while also potentially supporting inclusive and sustainable transformation.

Table 2. Observation results

Subject	Digital Channel	Observed Activities	SDGs Linkages
Coffee MSMEs	Instagram	Educational content and live brewing	SDGs 8
Local Marketplace	Shopee, Website	Flash sale and automated chatbot features	SDGs 9
EduTech Start-up	TikTok, YouTube	Interactive ads and student testimonials	SDGs 8
Mangrove Ecotourism	Facebook, Website	Ecotourism promotion and local guide training	SDGs 8 and SDGs 9

In this research, documentation plays a crucial role as a secondary data source used to strengthen the triangulation and validation process. The collected documents provide a broader context regarding the digital marketing strategies implemented, including annual reports, presentation materials, digital brochures, and sustainability reports. Through triangulative analysis of these documents, researchers can assess the consistency between informants narrative

statements and documentary evidence, as well as evaluate the extent to which digital marketing practices are truly connected to the principles and indicators of SDGs 8 and SDGs 9 in the context of Industry 5.0, as can be seen in Table 3.

Table 3. Relevant documents

Document	Information	Relevance
"Laporan Transformasi Digital 2023 - Startup EduTech"	Compiled internally, explaining AI based marketing strategies and personalization	SDGs 9
"Sustainability Brief: Perempuan dalam E-commerce"	Digital empowerment campaign for female workers in the marketplace	SDGs 8
"Poster Kampanye Digital UMKM Hijau"	Digitalization of environmentally friendly products	SDGs 8 and SDGs 9

Data Analysis Techniques

The data analysis approach used was thematic analysis, which is considered most appropriate for extracting meaning from qualitative data. The analysis process was conducted systematically to identify, organize, and interpret thematic patterns emerging from the data, thus providing a deeper understanding of the contribution of digital marketing strategies to achieving SDGs 8 and SDGs 9. The process involved reading transcripts, open coding of key narratives, identifying key themes (digital transformation, innovation in marketing strategies, informal digital job creation, and strengthening simple digital infrastructure), and establishing a pattern of relationships between themes and explicitly linking them to SDGs 8 and SDGs 9.

The first step in the analysis process was to carefully read the entire interview transcript. This step aimed to understand the context of the conversation and capture key narratives conveyed by the informants. During the reading process, the researcher noted key passages describing digital marketing practices, barriers encountered, and perceptions of digital transformation.

The next step was to openly code the key narratives. This process involved labeling pieces of data that had specific meaning, such as AI technology adoption, digital staffing enhancement, content experiments, or CRM integration. These codes were then grouped and analyzed to identify interconnections between the narratives.

From the coding process, researchers identified several key themes: digital transformation, innovation in marketing strategies, informal digital job creation, and strengthening simple digital infrastructure. These themes reflect the real world dynamics experienced by businesses in the digitalization process and also provide insight into the factors that drive or hinder digital marketing integration within the context of sustainable development.

The final step is to establish a pattern of relationships between themes and explicitly link them to SDGs 8 and SDGs 9. For example, the theme : digital job creation directly contributes to SDGs target 8.3 (promoting MSMEs and productive employment), while the themes : simple digital infrastructure and AI

based marketing innovation are relevant to SDGs 9.1 and SDGs 9.5, which emphasize infrastructure development and increasing industrial technological capacity. Thus, thematic analysis not only helps to systematically organize findings but also emphasizes meaningful thematic links to research objectives and the SDGs agenda.

As we can see in Figure 2, SDGs 9.1 about Develop sustainable, resilient and inclusive infrastructures it shows to develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well being, with a focus on affordable and equitable access for all and as we can see in Figure 2, SDGs 9.5 is about enhance research and upgrade industrial technologies where to enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.

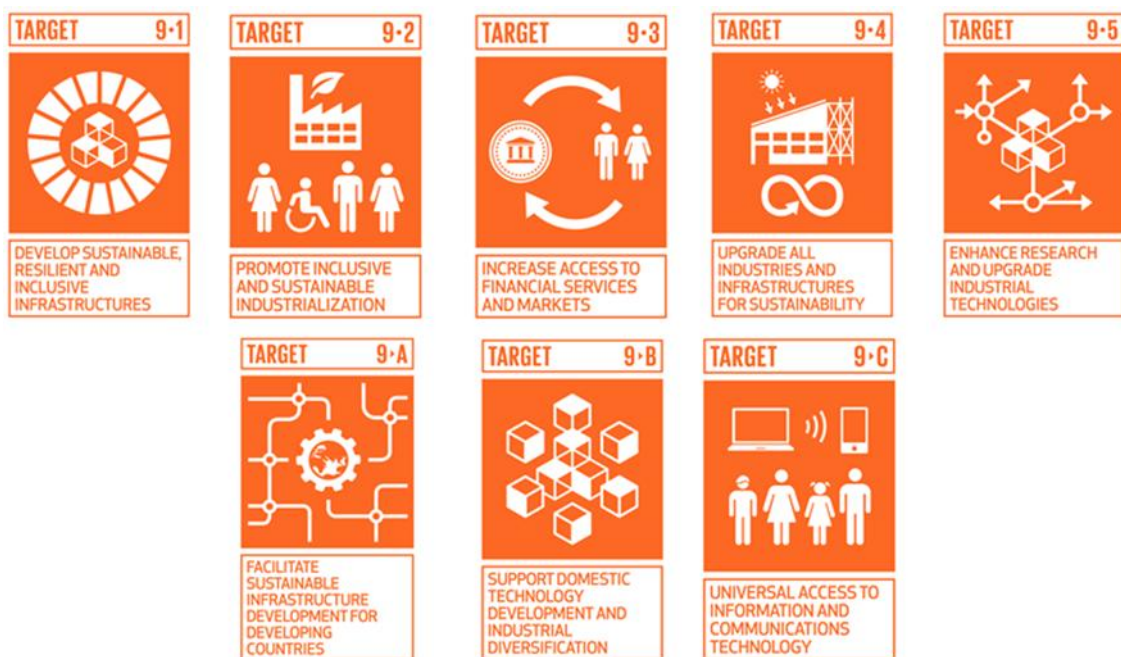


Figure 2. Sustainable Development Goal 9 targets
 (Source: <https://iesl.lk/SLEN/52/SDG9.php>)

As a visual illustration, here is Figure 3 which summarizes the contribution of digital marketing to SDGs 8 and SDGs 9 based on literature and field data.

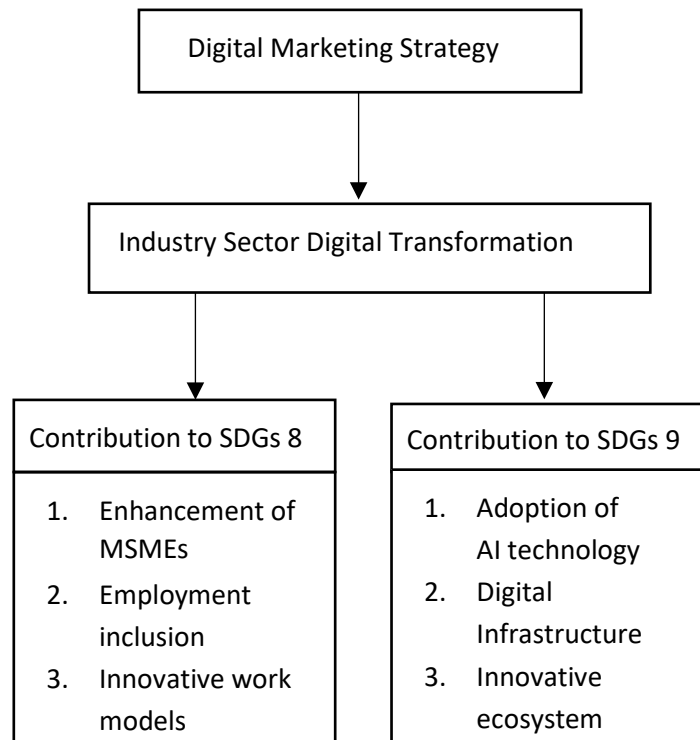


Figure 3. Relationship between Digital Marketing Strategy, Industry 5.0, SDGs 8 and SDGs 9

Data Validity and Validity

To ensure the validity and legitimacy of the data, the researchers implemented several verification strategies. The first step involved a source triangulation approach, comparing data from interviews, digital observations, and documents. The second step involved member checking, in which preliminary findings were reconfirmed with key informants. The third step involved compiling an audit trail, a systematic documentation of the entire research process, including field notes, NVivo’s coding logs, and recordings of the data interpretation process.

RESEARCH RESULT

Thematic Findings Based on NVivo’s

Data processing using NVivo’s software resulted in main themes and subthemes represented in a node structure, as shown in Table 4. This reflects consistent patterns in informants’ narratives regarding digital transformation, employment, innovation, and SDGs challenges.

Table 4. Thematic Node Structure of Coding Results in NVivo’s

Main Theme	Relevant Subthemes
SDGs 8: Decent Work	New Jobs, Digital Workers, HR Training

SDGs 9: Innovation and Infrastructure	Product Innovation, Digital Infrastructure, New Technologies
Digital Transformation	Platform Adoption, Content Strategy, Automation and AI
Implementation Challenges	Low Literacy, Platform Dependence, Limited Funds
Positive Social Impact	Improving Market Access, Digital Exports, Entrepreneurship

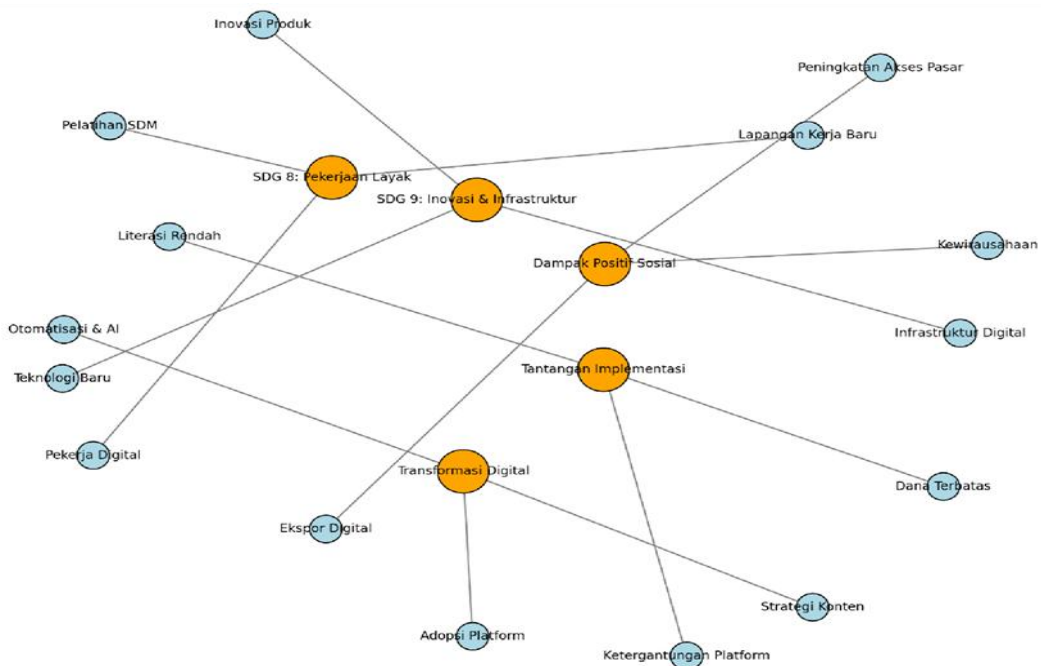


Figure 4. Thematic Map: Relationship between Digital Marketing Strategies, SDGs 8, and SDGs 9.

Word Cloud: Respondents Focus Keywords

The thematic analysis revealed a strong focus on practical implementation, where the most frequent terms, as visualized in the Word Cloud (Figure 5), were : jobs, Shopee, and training, highlighting the platforms central role in job creation and the corresponding need for upskilling. This indicates that digital platforms like Shopee significantly contribute to the creation of new jobs and the expansion of digital economic activity, particularly in the MSMEs sector. The frequent appearance of "training" reflects the importance of enhancing the capacity of local human resources in supporting digital marketing strategies. These findings reinforce the relevance of digital strategies to the SDGs 8 agenda in the context of decent work and economic productivity.



Figure 5. Word Cloud Result of NVivo’s Analysis

Visual Matrix: Relationships Between Themes

To understand the relationship between digital platforms (Digital Transformation) and their impact on SDGs 8 and SDGs 9, a Matrix Coding Query was conducted between the Platform Adoption and New Job Opportunities nodes and Product Innovation, as seen in Figure 6. Meanwhile, Figure 7 shows the Matrix Coding between the Digital Marketing Node and SDGs 8 and SDGs 9 (NVivo’s Results)

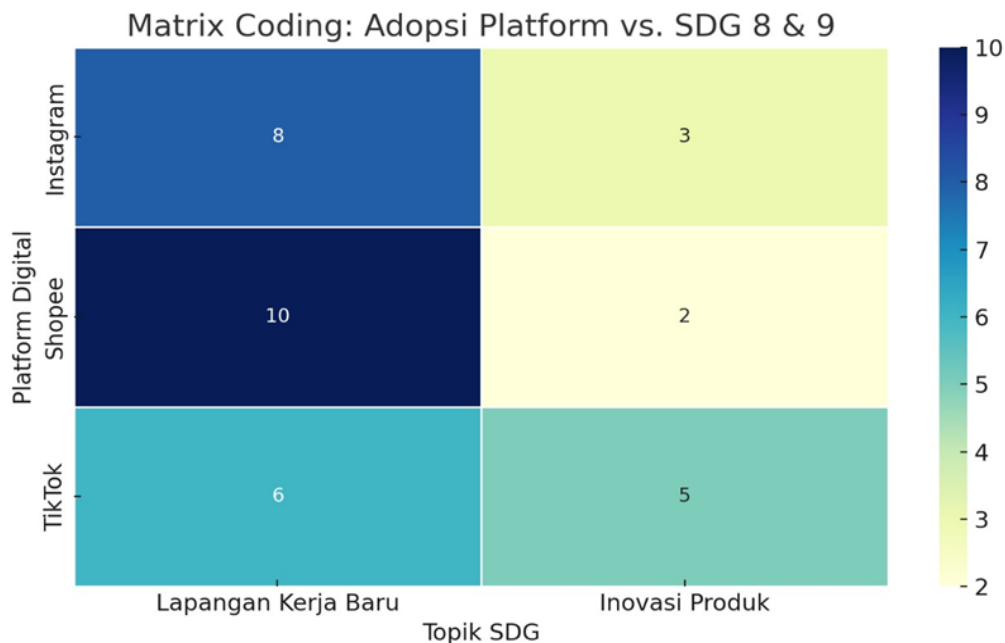


Figure 6. Matrix Coding: Platform Adoption vs SDGs 8 and SDGs 9

Interpretation of the thematic coding results indicates that Shopee is the digital platform most dominantly associated by informants with job creation, reflected in 10 references that explicitly mention Shopee's role in expanding market access and opening new job opportunities, particularly for online store

admins, resellers, and local logistics freelancers. The existence of online store features integrated with payment and delivery systems is considered to greatly facilitate MSMEs in managing sales, thus enabling business expansion and recruiting additional workers.

In contrast, Instagram is listed in eight references and TikTok in six, both also linking them to the expansion of the digital economy, albeit with differing functional tendencies. Interestingly, TikTok is more frequently associated with content and product innovation (five references), particularly in the form of visual storytelling, viral challenges, and creative uses of music. This suggests that TikTok excels as a creative marketing channel, where businesses not only promote products but also build stronger and more emotional brand narratives. Thus, it can be concluded that the role of digital platforms in supporting SDGs 8 and SDGs 9 is not uniform, but rather has specialization: Shopee is stronger in job creation and transactions, while TikTok stands out in the aspects of content innovation and creative marketing that can support product development and brand value.

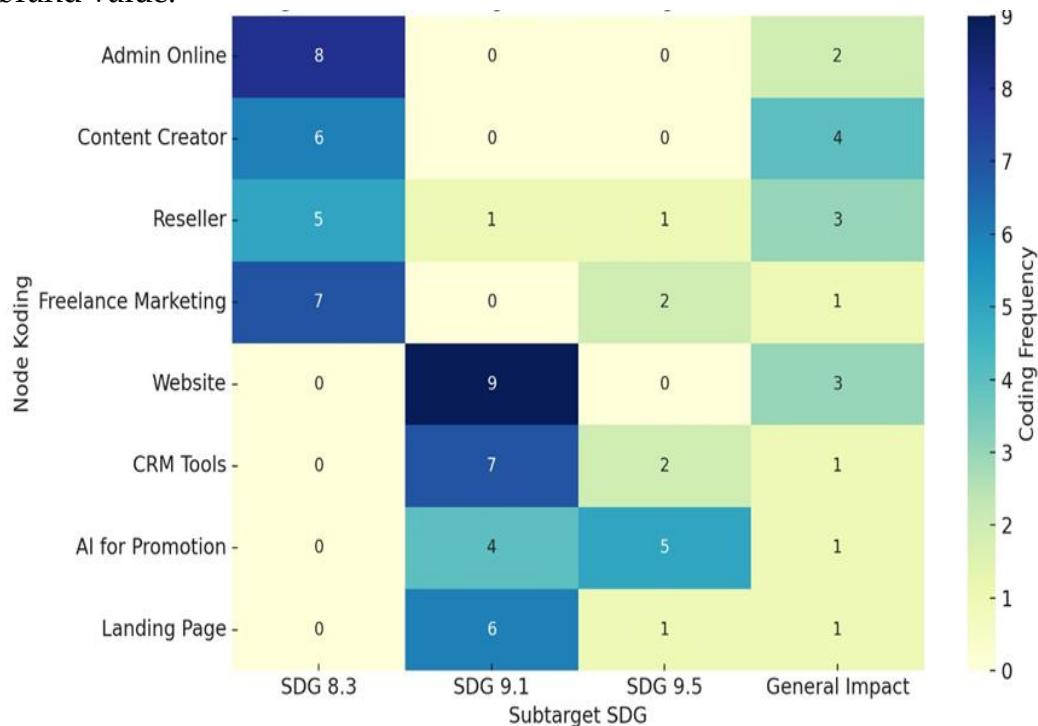


Figure 7. Matrix Coding between Digital Marketing Nodes, SDGs 8 and SDGs 9 (NVivo's Results)

Relevance to SDGs and Theory

The implementation of digital marketing by MSMEs has shown a real contribution to SDGs 8 and SDGs 9. This is evident in the pattern of digital technology adoption which not only impacts business performance but also creates new forms of employment and fosters innovation.

SDGs 8 (Decent Work and Economic Growth): The implementation of digital marketing has created new forms of employment, especially in the informal and semi-formal sectors, such as social media admins and content

creators. One informant, an MSMEs owner in the fashion sector, stated: "Since we migrated to digital platforms, we can recruit freelance content creators and online admins, thus creating more work for local youth" (KI-02). This is a concrete example of the contribution of digital MSMEs to the creation of productive employment, as targeted in SDGs 8.5 and SDGs 8.3. Previous research supports these findings, demonstrating that the adoption of digital platforms creates new employment opportunities in the digital sector (Virani, 2024) and that digital marketing trends among MSMEs are directly linked to economic growth (Ekaputra et al., 2024).

SDGs 9 (Innovation, Industry, and Infrastructure): Many MSMEs are starting to utilize simple digital infrastructure, such as websites, landing pages, and lightweight CRM systems, with some even experimenting with AI tools. This transformation reflects the key elements of SDGs 9: building reliable infrastructure and supporting technological innovation. The principles of using technologies like Cognitive Digital Twins for real time optimization in manufacturing (Sharma & Gupta, 2024) can be applied in the context of MSMEs progressively adopting digital marketing. Other research confirms that digitalization integration in MSMEs not only impacts operational efficiency but also promotes sustainability, in line with SDGs 9 (Melo et al., 2023).

Theoretical and Practical Implications

The findings contribute to the TOE (Technology Organization Environment) framework by emphasizing that successful implementation of digital marketing is determined not only by technology availability but also by organizational readiness (visionary leadership, employee digital literacy) and external environmental support (government policy, mentoring networks). Practically, this research emphasizes the importance of digital inclusion. Business actors, such as women entrepreneurs and MSMEs in rural areas, are often marginalized. Therefore, public policies need to be directed at bridging this gap in technology access so that digital transformation can be enjoyed equitably and sustainably.

Closing the Literacy and Infrastructure Gap

Although the adoption of digital marketing strategies continues to progress, the analysis reveals a critical vulnerability: a high degree of dependence on a few dominant external platforms, most notably Shopee. This reliance, while effective for market entry, poses a significant long term risk to the digital resilience of MSMEs. The concentration of market power in a single entity creates a single point of failure. This is reflected in the statement of one informant, a digital consultant, who noted: "If there are changes to the algorithm or marketplace rules, we are in a panic because we don't have our own system" (KI-03). This dependence inhibits the development of internal digital assets, such as proprietary Customer Relationship Management (CRM) systems or independent e-commerce websites, thereby limiting innovation and weakening long-term digital sovereignty. A truly sustainable digital transformation, aligned with the human centric and resilient principles of Industry 5.0, must therefore include

strategies that foster digital independence and empower local businesses to build their own technological capacity.

CONCLUSIONS AND RECOMMENDATIONS

This study explores how digital marketing strategies play a role in the digital transformation process towards Industry 5.0 by emphasizing its contribution to the achievement of Sustainable Development Goals (SDGs) 8 and 9. Using a qualitative approach and thematic analysis through NVivo's software, the results of the study reveal that digital marketing practices have developed not only as a commercial tool, but also as a medium for economic empowerment and structural innovation in the context of sustainable development.

The digital transformation implemented through the use of social media, e-commerce, and other digital channels has demonstrated a tangible impact on business growth and the creation of new jobs, particularly in the informal digital sector, such as social media administrators, content creators, and affiliate marketers. Many MSMEs, particularly those in the creative, culinary, and agribusiness sectors, have experienced significant increases in revenue after implementing marketing strategies based on digital platforms such as Shopee, TikTok, and Instagram. This fact demonstrates that digital strategies not only contribute to market expansion but also create new economic opportunities that align with SDGs 8 agenda on decent work and economic growth.

Furthermore, this study also shows that innovation in digital marketing helps strengthen companies internal digital infrastructure. The adoption of Customer Management Systems, website development, utilization of analytics dashboards, and automation of marketing campaigns reflect a clear push towards technological advancement and operational efficiency, supporting SDGs 9 on inclusive and sustainable industrial development. This demonstrates that digital marketing not only creates new relationships with consumers but also drives innovation in internal business processes.

Despite this, the study found that significant gaps remain, particularly in terms of digital literacy, limited technological capital, and reliance on external digital platforms. Some businesses face challenges in understanding algorithmic changes, building their own digital assets, and managing customer data independently. This gap highlights the importance of capacity building and digital independence to ensure a truly sustainable and adaptive transformation.

From an empirical perspective, this study provides a concrete picture of how digital marketing strategies have become a transformative force that transcends promotional functions, becoming a community economic development strategy, expanding human resource capacity, and a tool for business innovation. Meanwhile, from a theoretical perspective, this study fills a gap in the literature that directly links digital marketing practices to the achievement of the SDGs within a more human centric Industry 5.0 framework. This study also emphasizes the importance of software based qualitative analysis approaches such as NVivo's for identifying narrative patterns related to sustainability, the digital economy, and industrial innovation.

Economically, digital marketing strategies have proven effective in expanding market access, creating flexible jobs, and driving the growth of micro enterprises with low costs and high reach. The finding that many businesses conduct internal digital training for their staff indicates that digital marketing can serve as a capacity building tool, not just a transactional tool.

The most striking aspect of these findings is that the success of a digital marketing strategy depends not only on technological sophistication, but also on the extent to which it integrates sustainability and social engagement into the brand narrative. Digital campaigns that highlight local issues, support eco friendly products, or engage with communities have proven to be more effective and resonate strongly with consumers. This is where digital marketing strategies begin to show their new face as development tools, rather than simply commercial ones.

In conclusion, this research opens the door for further, deeper exploration of the dynamics of digital marketing in supporting the SDGs, particularly with a cross disciplinary and longitudinal approach. Future researchers can explore how digital strategies can be developed not only technically, but also ethically and inclusively to truly become part of sustainable development solutions in the Industry 5.0 era.

This research provides important practical and theoretical implications in the context of developing digital marketing strategies aligned with sustainable development goals, particularly SDGs 8 and SDGs 9. Practically, the results of this study can serve as a reference for Micro, Small, and Medium Enterprises (MSMEs), the government, and digital platform providers in designing marketing strategies that are not only commercially effective but also have social and economic impacts. Digital marketing has proven to be able to play a role as a medium for inclusive economic development and a driver for the gradual adoption of technological innovation. The theoretical implications lie in strengthening the argument that modern marketing strategies cannot be separated from the values of sustainability, digital inclusivity, and an orientation towards long term impacts in the Industry 5.0 ecosystem.

However, like any research, this study has several limitations that require critical consideration. First, the qualitative approach employed provides in depth insights into the experiences and perspectives of informants, but it is contextual and cannot be broadly generalized. This limitation is particularly evident in the limited number of informants and the purposive selection of the sample, which was based on relevance to the topic, rather than statistical representation. Therefore, the findings reflect the narratives of a specific group active in digital transformation, but may not necessarily represent the full spectrum of business actors in other sectors or regions.

While using NVivo's software as an analysis tool provides a systematic thematic structure, it remains highly dependent on the researchers accuracy and consistency in coding and interpreting the data. The potential for interpretive bias remains, particularly in the subjective process of determining themes or inferring relationships between nodes. Furthermore, limited user experience

with NVivo's advanced features can also impact the depth of visualization analysis or thematic queries that can be further explored.

Another limitation arises from the rapidly changing dynamics of digital technology and media. Digital platforms, algorithms, and user preferences undergo regular updates, meaning that digital marketing strategies that were relevant at the time of the study may become less effective in the near future. This poses a challenge in maintaining the sustainability and validity of this study's findings in the context of time and the dynamic digital environment.

ADVANCED RESEARCH

Based on these limitations, it is recommended that future research expand the scope of analysis by involving industry players from various sectors and geographic regions, and combine qualitative and quantitative methods to obtain a more comprehensive picture. A longitudinal design is also recommended to evaluate strategic changes and their impact in the medium and long term. Collaboration with information technology experts, digital marketing system designers, and policy planners can enrich perspectives and enhance the validity of cross-disciplinary findings.

Ultimately, the success of a sustainable digital marketing strategy is determined not only by the choice of platform or technology, but also by the quality of the actors' social reflection on development goals. Therefore, synergy between business actors, academics, and policymakers is needed to create an inclusive, adaptive, and impactful digital environment.

REFERENCES

- Asbeetah, Z., Alzubi, A., Khadem, A., & Iyiola, K. (2025). Harnessing digital transformation for sustainable performance: Exploring the mediating roles of green knowledge acquisition and innovation performance under digital transformational leadership. *Sustainability*, 17(5), 2285. <https://doi.org/10.3390/su17052285>
- Deloitte. (2023). The Deloitte Global 2023 Gen Z and Millennial Survey. <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html>
- Ekaputra, Y., Wijaya, F., & Setiawan, B. (2024). Dampak Tren Pemasaran Digital Terhadap Pertumbuhan Ekonomi Sektor UMKM di Indonesia. *Jurnal Bisnis dan Manajemen*, 11(1), 30-45.
- Febdilan, F. K., Hali, M. S., & Lantang, A. G. (2024). Marketing Strategy Through Digital Marketing Efforts to Increase Occupancy in Homestay in Kuta Lombok. *International Journal of Economics Development Research*, 5(1), 855-870.
- Kazan, G., Kocamış, T. U., & Öker, F. T. (2025). Sdg 9-Industry, Innovation and Infrastructure: A Review on Companies in the Bist Sustainability Index. *Journal of Governance and Regulation*, 14(1), 307-317. <https://doi.org/10.22495/jgrv14i1siart7>

- Khan, M. R. (2024). Digital Transformation for Sustainability: Industry 5.0 in UK SMEs. *Human Interaction and Emerging Technologies (IHJET 2024)*. <https://doi.org/10.54941/ahfe1005522>
- Melo, Isotilia & Queiroz, Geandra & Alves Junior, Paulo & Sousa, Thales & Yushimito, Wilfredo & Pereira, Dr. (2023). Sustainable digital transformation in small and medium enterprises (SMEs): A review on performance. *Heliyon*. 9. e13908. [10.1016/j.heliyon.2023.e13908](https://doi.org/10.1016/j.heliyon.2023.e13908).
- Pinto Mick, M. M. A., Kovaleski, J. L., Mick, R. L., & Chiroli, D. M. D. G. (2024). Developing a sustainable digital transformation roadmap for SMEs: Integrating digital maturity and strategic alignment. *Sustainability*, 16(20), 8745. <https://doi.org/10.3390/su16208745>
- Rejeb, A., Rejeb, K., Zrelli, I., & Süle, E. (2025). Industry 5.0 as seen through its academic literature: An investigation using co-word analysis. *Discover Sustainability*, 6(1), 307. <https://doi.org/10.1007/s43621-025-01166-0>
- Ren, J., & Jirawuttinunt, S. (2025). Strategic Digital Transformation and Firm Sustainability under Industry 5.0: Evidence from Manufacturing Sector in China. *Journal of Information Systems Engineering and Management*. <https://doi.org/10.52783/jisem.v10i42s.8193>
- Sharma, R., & Gupta, H. (2024). Leveraging cognitive digital twins in industry 5.0 for achieving sustainable development goal 9. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2024.141364>
- Siti Rahayuningsih, Iwan Agus Darmawan, Sri Yuliani Pangesti, Ainun Fuad, Ludi Wishnu Wardana, & Bagus Shandy Narmaditya. (2024). Literature Review: Strategies for Using Digital Marketing to Improve MSME Performance in Supporting SDGs Programs. *International Journal of Economics, Management and Accounting*, 1(2), 201–220. <https://doi.org/10.61132/ijema.v1i2.62>
- Varriale, V., Camilleri, M. A., Cammarano, A., Michelino, F., Müller, J., & Strazzullo, S. (2024). Unleashing digital transformation to achieve the sustainable development goals across multiple sectors. *Sustainable Development*, 33(1), 565-579.
- Virani, V. A. (2024). Marketing communications in the era of digital transformation and Industry 5.0. *International Journal of E-Business Research*, 20(1), 45–61. <https://doi.org/10.4018/IJEER.326057>