

Priority Determination of Digital Marketing Media for MSMEs in Indonesia

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Abstract. *More and more Micro, Small, and Medium Enterprises (MSMEs) in Indonesia have used digital marketing techniques to broaden market access, build good customer relations, and enhance business competitiveness. In addition, the growing number of digital marketing media has been recognized as one of the strategic issues for MSMEs in Indonesia due to their limitation in terms of budget, technology, and management capacity since most existing literature tends to discuss one particular type of digital marketing medium or even digital marketing adoption but not the priority of the media at all. To address this issue, the current study aims to identify the priority of digital marketing media for MSMEs in Indonesia using the Analytic Hierarchy Process (AHP). Seven alternative forms of digital marketing were considered in the analysis such as social media marketing, search engine optimization (SEO), digital content marketing, affiliate marketing, email marketing, pay-per-click (PPC) advertising, and instant messaging. Five criteria which include cost-efficiency, market reach, interactivity, implementation ease, and performance measurability were applied as evaluation factors for the alternatives. Five experts in digital marketing and MSMEs development were invited to assess the priorities of the alternatives according to the set criteria, and the judgments from the experts were analyzed based on AHP consistency ratio prior to aggregation. As a result, market reach emerged as the first priority among other criteria followed by performance measurability, cost efficiency, interactivity, and implementation ease. Among alternative options, social media marketing became the top priority (0.2381), followed by SEO (0.2354), digital content marketing (0.1946), affiliate marketing (0.1570), email marketing (0.0591), PPC advertising (0.0586), and instant messaging (0.0572).*

Keywords: *Marketing, Digital Marketing, MSME, Analytical Hierarchy Process (AHP)*

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Introduction

Micro, Small and Medium Enterprises (MSMEs) play an important role in Indonesia's economy through their contributions to employment, income generation, and economic activity. However, increasing digitalization requires MSMEs to continuously adapt their business practices to remain competitive. Digital transformation can improve operational efficiency, expand market access, strengthen customer relationships, and enhance competitiveness. Nevertheless, its adoption and effectiveness among MSMEs remain uneven because they depend on technological capabilities, organizational readiness, managerial competencies, and the ability to integrate digital technologies into business processes (Elsa et al., 2025; Held et al., 2026). Therefore, digital transformation is not merely a technological issue but also a strategic decision concerning the allocation of limited organizational resources.

Digital marketing represents one of the most accessible forms of digital transformation for MSMEs. It enables firms to reach customers beyond geographical boundaries, communicate directly with target markets, and improve the effectiveness of promotional activities. MSMEs can employ various digital marketing channels, including social media, search engine optimization (SEO), digital content, email marketing, affiliate marketing, pay-per-click (PPC) advertising, and instant messaging. However, these channels differ in terms of cost, market reach, customer interaction, implementation complexity, targeting capability, and measurability. Consequently, digital marketing should not be viewed as a single activity, but as a portfolio of alternative channels that must be selected according to organizational objectives and capabilities (Goldman et al., 2021).

The growing importance of digital marketing is also reflected in the widespread use of social media in Indonesia. As shown in Figure 1, the number of active social media users increased from approximately 62 million in January 2014

to 191 million in January 2022, representing more than a threefold increase within eight years. Particularly rapid growth occurred after 2016, with the number of users increasing from 79 million in 2016 to 150 million in 2019 and reaching 191 million in 2022. More recent data further demonstrate the substantial reach of social media in Indonesia. According to the Digital 2026: Indonesia report, Indonesia recorded approximately 180 million active social media user identities in October 2025, equivalent to 62.9% of the country's total population (Kemp, 2025).

However, the latest figure should not be interpreted as a direct continuation of the 2014–2022 series because changes in data sources and measurement methodologies may affect comparability across reporting periods. Nevertheless, the latest statistics confirm that social media remains an important component of Indonesia's digital environment and provides MSMEs with substantial opportunities to reach and interact with potential customers. At the same time, the availability of multiple digital platforms and marketing channels increases the complexity of channel selection, making the strategic allocation of limited marketing resources increasingly important.

Previous studies have demonstrated a positive relationship between digital marketing adoption and SME performance. Digital marketing and e-commerce have been associated with improvements in financial and sustainability performance (Gao et al., 2023), while digital marketing capabilities have also been linked to stronger market performance (Chinakidzwa & Phiri, 2020) and sustainable SME growth (Bruce et al., 2023; Sharabati et al., 2024). Similar evidence has been reported in Indonesia. Djakasaputra et al. (2021) highlighted the contribution of digital marketing to MSME sales performance, while Purba et al. (2021) identified the relevance of digital marketing and e-commerce to financial performance and business sustainability. More recent studies have also emphasized the role of social media marketing and local market

characteristics in Indonesian MSME performance (Tatik & Setiawan, 2025; Rizkita et al., 2025). Nevertheless, evidence that digital

marketing improves performance does not necessarily indicate which digital marketing channel should receive the highest priority.



Figure 1.
Active Social Media Users in Indonesia, 2014–2022
Source: Data Reportal, Digital 2022: Indonesia

This issue is particularly relevant because MSMEs generally operate under financial, human resource, technological, and managerial constraints. Although adopting multiple digital channels may expand market reach, simultaneously managing all available channels may not be feasible. Previous studies have identified organizational, technological, and environmental factors that influence digital marketing adoption and effectiveness (Setkute & Dibb, 2022; Fu et al., 2024; Mittal & Kumar, 2024). Moreover, much of the existing literature has examined individual channels—particularly social media—or focused on the determinants and outcomes of digital marketing adoption (Ali Abbasi et al., 2022; Chatterjee et al., 2021; Eze et al., 2021). This creates a practical need to determine which channels offer the greatest strategic value when MSMEs must allocate limited resources among competing alternatives.

Despite the growing literature on SME digital transformation and digital marketing (Elsa et al., 2025; Noer et al., 2025), limited attention has been given to the simultaneous prioritization of multiple digital marketing

channels using multiple decision criteria, particularly in the Indonesian MSME context. Existing studies predominantly examine whether firms adopt digital technologies, the factors influencing their adoption, or their effects on business performance. Such approaches provide valuable evidence regarding adoption and effectiveness but offer limited guidance for MSMEs that must choose among several digital marketing alternatives. Channel selection involves trade-offs because an alternative with broad market reach may require greater financial and managerial resources, while a relatively inexpensive channel may provide different levels of interactivity, targeting, or performance measurability. Therefore, channel selection should consider multiple criteria simultaneously rather than relying solely on cost, popularity, or market reach.

This prioritization problem can be addressed as a multi-criteria decision-making (MCDM) problem. Previous research has demonstrated the applicability of MCDM approaches to digital marketing technology evaluation. Trung and Thanh (2022), for example, evaluated

digital marketing technologies using multiple criteria under managerial uncertainty, while Bobar et al. (2020) applied a Fuzzy AHP-based model to assess and rank social media efficiency. The Analytic Hierarchy Process (AHP) is particularly suitable because it structures a complex decision into a hierarchy of goals, criteria, and alternatives and derives relative priorities through pairwise comparisons (Saaty, 1980; Saaty & Vargas, 2012). AHP has also been applied to decision-making problems involving digital technologies and SMEs (Hsu & Tang, 2020; Fernández et al., 2024).

Accordingly, this study applies AHP to determine the priority of digital marketing media for MSMEs in Indonesia. Seven alternatives are evaluated: social media, search engine optimization (SEO), digital content, affiliate marketing, email marketing, pay-per-click (PPC) advertising, and instant messaging, based on five criteria: cost efficiency, market reach, interactivity, implementation ease, and performance measurability. Specifically, this study aims to: (1) structure the criteria and digital marketing alternatives relevant to Indonesian MSMEs; (2) determine their relative priorities based on expert judgments; and (3) derive managerial implications for

more strategic digital marketing resource allocation. By doing so, this study extends the existing literature from examining the adoption and effectiveness of individual digital channels toward a decision-oriented framework for prioritizing competing digital marketing alternatives under multiple criteria.

Research Methodology

This study employed a quantitative multi-criteria decision-making (MCDM) approach using the Analytic Hierarchy Process (AHP) to determine the priority of digital marketing media for Micro, Small and Medium Enterprises (MSMEs) in Indonesia. AHP was selected because the decision involves multiple alternatives evaluated against several criteria simultaneously. Previous studies have also demonstrated the relevance of MCDM approaches for evaluating digital marketing technologies (Trung & Thanh, 2022). Conventional AHP was applied because it provides transparent priority weights based on expert pairwise comparisons and enables the decision problem to be structured into goals, criteria, and alternatives (Saaty, 1980; Saaty & Vargas, 2012). The research process consisted of five main stages, as illustrated in Figure 2.



Figure 2.
The Research Framework

Problem Definition

The decision problem was defined as determining which digital marketing media should be prioritized by MSMEs in Indonesia.

Hierarchy Construction

The AHP hierarchy consisted of three levels. The first level represented the research objective: prioritizing digital marketing media for MSMEs. The second level consisted of five evaluation criteria: cost efficiency, market reach, interactivity, implementation ease, and measurable performance. The third level consisted of seven digital marketing media alternatives evaluated in this study.

Expert Selection and data collection

Data were collected through expert judgment using purposive sampling. Five experts were selected based on at least five years of relevant experience in digital marketing, MSME development, management, or marketing strategy. The panel consisted of two digital marketing practitioners, two researchers in management and digital business, and one MSME development consultant.

Each expert completed an AHP pairwise comparison questionnaire using Saaty's 1–9 fundamental scale (Saaty, 1980), where 1 indicates equal importance and higher values represent stronger preference for one element over another.

Weight and Consistency Calculation

Pairwise comparison matrices were constructed and normalized to obtain the priority weights of the criteria and alternatives. The consistency of each expert's judgment was evaluated using the Consistency Ratio (CR). Judgments with $CR \leq 0.10$ were considered sufficiently consistent and retained for further analysis.

Since multiple experts were involved, consistent judgments were aggregated using the geometric mean, which preserves the reciprocal properties of AHP comparison matrices (Saaty & Vargas, 2012).

Interpretation and Recommendation

The aggregated weights were used to calculate the global priority of each digital marketing alternative. The alternatives were ranked according to their global priority weights, with the highest-ranked alternative interpreted as the most preferred digital marketing medium within the proposed decision framework. The results were subsequently discussed in relation to previous studies on MSME digital marketing and digital transformation.

Results and Discussion

Weight and Consistency Calculation

The consistency analysis showed considerable variation among the five experts, as presented in Table 1. Respondents 1 and 5 obtained Consistency Ratio (CR) values of 0.09 and 0.03, respectively, satisfying the acceptable threshold of $CR \leq 0.10$. In contrast, Respondents 2, 3, and 4 obtained CR values of 0.44, 0.23, and 0.40, indicating that their pairwise comparisons did not meet the required consistency level. Following the AHP consistency guidelines (Saaty, 1980; Saaty & Vargas, 2012), only the judgments of Respondents 1 and 5 were therefore included in the final aggregation.

The exclusion of the other respondents does not necessarily indicate that their professional judgments were incorrect; rather, their pairwise comparisons did not satisfy the internal consistency required for AHP aggregation. The observed inconsistencies may have resulted from differences in the experts' familiarity with Saaty's pairwise comparison procedure, their interpretation of the comparison scale, or the cognitive difficulty of maintaining consistent preferences across multiple criteria and alternatives. Differences in how experts interpreted the relative intensity of preference between criteria and alternatives may also have contributed to the higher CR values.

Table 1.
Result of All Respondents

Decision Alternatives	Weight				
	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5
Digital	0.2197	0.2208	0.4435	0.1727	0.1532
Content	0.0567	0.0909	0.1206	0.0246	0.0550
Instant	0.2684	0.1979	0.2403	0.1044	0.1802
Messaging	0.1094	0.3225	0.0249	0.2507	0.2095
Social Media	0.0516	0.0321	0.1208	0.0578	0.0653
Affiliate	0.0193	0.0772	0.0249	0.1627	0.1643
Email	0.2748	0.0585	0.0249	0.2271	0.1722
PPC					
SEO					
Consistency Ratio (CR)	0.0900	0.4400	0.2300	0.4000	0.0300
Interpretation (CR ≤ 0.10)	Consistent	Not Consistent	Not Consistent	Not Consistent	Consistent

Consequently, the final results were based on two consistent expert judgments. Although this procedure ensured compliance with the predefined AHP consistency requirement, the reduced effective expert sample represents an important methodological limitation and may limit the robustness and generalizability of the resulting priority rankings. Future studies are therefore encouraged to involve a larger expert panel and provide more structured guidance or familiarization with the pairwise comparison procedure before eliciting judgments.

Priority of Evaluation Criteria

The aggregated AHP results showed that Market Reach was the most important criterion, with a priority weight of 0.31, followed by Measurable Performance (0.24), Cost Efficiency (0.20), Interactivity (0.15), and Ease of Implementation (0.10).

The dominance of Market Reach indicates that the ability to access a broader customer base is the primary consideration when selecting digital marketing media for MSMEs. This finding is consistent with previous studies demonstrating the contribution of digital marketing and e-commerce to MSME performance and market expansion (Gao et al., 2023; Sharabati et al., 2024; Djakasaputra et al., 2021).

Measurable Performance ranked second, suggesting that experts also valued the ability to monitor marketing outcomes through indicators such as reach, engagement, traffic, leads, conversions, and sales. This reflects the increasingly data-driven nature of digital marketing and is consistent with studies emphasizing the role of digital capabilities in SME performance (Deku et al., 2024; Mittal & Kumar, 2024).

Cost Efficiency ranked third, reflecting the resource constraints commonly experienced by MSMEs. Previous studies similarly identify limited organizational and financial resources as barriers to digital marketing implementation (Setkute & Dibb, 2022; Bruce et al., 2023). However, its lower weight relative to Market Reach and Measurable Performance indicates that low cost alone is insufficient to determine channel priority.

Interactivity and Ease of Implementation received lower weights. Although customer interaction remains important in digital marketing, particularly through social media (Chatterjee et al., 2021; Amoah & Jibril, 2021), the results suggest that experts placed greater emphasis on reach and measurable outcomes. Overall, these findings indicate that MSMEs should evaluate digital marketing media based on a balance between market access,

measurability, and resource efficiency rather than selecting channels solely because they are inexpensive or easy to implement.

Priority of DigitalMarketing media

Following the consistency assessment, the judgments of Respondents 1 and 5 were aggregated using the geometric mean.

Table 2.
Final Result of Aggregation

Priority Rating	Decision Alternatives	Weight
1	<i>Social Media</i>	0.2381
2	<i>SEO</i>	0.2354
3	<i>Digital Content</i>	0.1946
4	<i>Affiliate</i>	0.1570
5	<i>Email</i>	0.0591
6	<i>PPC</i>	0.0586
7	<i>Instant Messaging</i>	0.0572
Consistency Ratio (CR)		0.0300

Social Media Marketing received the highest global priority weight of 0.2381. Its high priority can be associated with its ability to combine broad market reach, customer interaction, brand visibility, and flexible promotional activities. This result is consistent with previous research highlighting the adoption and strategic role of social media in SMEs (Ali Abbasi et al., 2022; Eze et al., 2021; Chatterjee et al., 2021; Amoah & Jibril, 2021; Mushi, 2024). Evidence from Indonesia also supports the relevance of digital and social media marketing to MSME performance (Djakasaputra et al., 2021; Tatik & Setiawan, 2025).

However, SEO obtained a nearly identical weight of 0.2354, with a difference of only 0.0027 from Social Media Marketing. This indicates that the two alternatives have very similar priorities within the developed AHP framework. SEO can complement social media by improving organic visibility and enabling MSMEs to reach customers with active information-search or purchase intentions.

The resulting aggregated comparison matrix obtained a CR of 0.03, indicating acceptable consistency. The global priority weights of the seven digital marketing alternatives are presented in Table 2.

Therefore, the findings suggest that MSMEs should not rely exclusively on social media but may benefit from combining social media engagement with SEO-based visibility.

Digital Content Marketing ranked third with a weight of 0.1946. Content can function both as an independent marketing activity and as a supporting capability for social media and SEO by providing relevant, informative, and persuasive information to customers. This finding is consistent with studies emphasizing the importance of digital marketing capabilities for SME competitiveness and performance (Deku et al., 2024; Rizkita et al., 2025).

Affiliate Marketing ranked fourth with a weight of 0.1570. It offers MSMEs access to external promotional networks and performance-based marketing opportunities, although its effectiveness may depend on the availability of appropriate partners, commission structures, and product attractiveness. It may therefore serve as a complementary strategy after MSMEs establish their core digital presence.

Email Marketing, PPC Advertising, and Instant Messaging received substantially lower weights of 0.0591, 0.0586, and 0.0572, respectively. These results should not be interpreted as evidence that these channels are ineffective. Rather, under the criteria and expert judgments used in this study, they were considered less strategically important than Social Media Marketing, SEO, Digital Content Marketing, and Affiliate Marketing. Email marketing may depend on an established customer database, PPC requires continuous advertising expenditure and campaign-management capabilities, while instant messaging offers strong interaction but potentially more limited market reach.

Discussion

Previous research on SME digital marketing has predominantly focused on adoption factors, individual digital channels, technological capabilities, and the relationship between digital marketing and business performance (Gao et al., 2023; Sharabati et al., 2024; Ali Abbasi et al., 2022; Eze et al., 2021; Chatterjee et al., 2021).

The results indicate that channel prioritization should not be based solely on popularity or cost. Market Reach emerged as the dominant criterion, followed by Measurable Performance and Cost Efficiency. These results reflect the need for MSMEs to balance market expansion with measurable outcomes and limited resources. They are also consistent with studies emphasizing the importance of technological, organizational, and digital marketing capabilities in determining SME performance (Fu et al., 2024; Mittal & Kumar, 2024).

A particularly important finding is the very small difference between Social Media Marketing and SEO. Although social media ranked first, the results do not support treating it as an exclusive solution. Instead, the combination of social media and SEO may provide complementary strategic benefits: social media facilitates engagement and communication, whereas SEO strengthens long-term search visibility.

Digital Content Marketing can further support both channels by providing the information required for engagement, search visibility, and value communication.

From an MCDM perspective, the findings are consistent with previous studies that conceptualize digital marketing technology selection as a multi-criteria decision problem. Trung and Thanh (2022) applied a fuzzy MCDM approach to evaluate digital marketing technologies, while Bobar et al. (2020) employed a Fuzzy AHP-based model to assess social media efficiency. The present study extends this body of research by applying conventional AHP to the prioritization of multiple digital marketing media in the context of Indonesian MSMEs.

The findings suggest that MSMEs should prioritize digital marketing channels rather than attempt to use all available channels simultaneously. Within the proposed framework, Social Media Marketing and SEO emerge as the two leading priorities, supported by Digital Content Marketing. Accordingly, MSMEs may initially focus their limited resources on building social media engagement and search visibility while developing high-quality digital content to support both activities.

The high weight of Measurable Performance also indicates the importance of using basic digital marketing metrics, including reach, engagement, website traffic, leads, conversions, and sales. As organizational capabilities increase, lower-ranked alternatives such as affiliate marketing, email marketing, PPC advertising, and instant messaging can be incorporated according to specific business needs.

For policymakers and MSME development organizations, these results suggest that digitalization programs should move beyond general digital literacy training. Capacity-building initiatives may place greater emphasis on practical skills in social media management, SEO, content creation, digital analytics, and

performance measurement to support more effective allocation of MSME marketing resources.

Theoretical Contribution and Limitation

The study contributes to the MSME digital marketing literature by shifting the analytical focus from the adoption or effectiveness of individual channels toward the multi-criteria prioritization of competing digital marketing alternatives. By integrating Market Reach, Measurable Performance, Cost Efficiency, Interactivity, and Ease of Implementation within a single AHP framework, the study provides a decision-oriented perspective on digital marketing resource allocation.

Nevertheless, the final aggregation was based on only two experts whose judgments satisfied the $CR \leq 0.10$ requirement. Therefore, the resulting priorities should be interpreted within the scope of the expert judgments and criteria used in this study rather than as universally applicable rankings for all Indonesian MSMEs. Future research could involve a larger expert panel and examine whether priorities differ across MSME sectors, business sizes, or levels of digital maturity.

Conclusion

This study applied the Analytic Hierarchy Process (AHP) to prioritize digital marketing media for MSMEs in Indonesia based on five decision criteria and seven alternatives. The results show that Market Reach is the most important criterion with a weight of 0.31, followed by Measurable Performance (0.24), Cost Efficiency (0.20), Interactivity (0.15), and Ease of Implementation (0.10). These findings indicate that MSMEs should prioritize digital marketing media based primarily on their ability to expand market access and provide measurable outcomes, while also considering resource efficiency.

Among the seven alternatives, Social Media Marketing obtained the highest global priority weight (0.2381), closely followed by Search

Engine Optimization (SEO) (0.2354) and Digital Content Marketing (0.1946). The very small difference between Social Media Marketing and SEO suggests that both represent leading strategic priorities within the proposed decision framework. Rather than relying on a single channel, MSMEs may benefit from integrating social media engagement with SEO-based visibility and supporting both through relevant digital content. Affiliate Marketing ranked fourth, while Email Marketing, PPC Advertising, and Instant Messaging received relatively lower priorities.

The study contributes to MSME digital marketing research by shifting the focus from the adoption or effectiveness of individual channels toward the multi-criteria prioritization of competing digital marketing alternatives. From a managerial perspective, the findings can support MSMEs in allocating limited digital marketing resources more strategically and can inform capacity-building programs focused on social media management, SEO, content development, and digital performance measurement.

However, the findings should be interpreted with caution because the final AHP aggregation was based on only two experts whose judgments satisfied the consistency requirement of $CR \leq 0.10$. Future studies should involve a larger and more diverse expert panel and examine whether digital marketing priorities vary across MSME sectors, business sizes, regions, and levels of digital maturity.

Recommendation

MSMEs should apply the prioritization approach in digital marketing. Social Media Marketing should receive the highest priority as the primary channel, with the near-equivalent priority given to the SEO channel. Digital Content Marketing can be applied to support both channels, and Affiliate Marketing could be used as the additional channel. MSMEs should use the market reach and performance measurement as their criteria for choosing marketing channels, not the simplicity of implementation.

Policy makers and MSME assistance organizations should develop effective digitalization programs including the application of social media marketing, SEO, digital content creation, and analytics. As Market Reach and Measurable Performance are the most important criteria for selection, the training should include not just using digital channels but also measuring the results of the efforts. Different types of assistance should also be provided, depending on the level of digitalization of the MSME and its capabilities.

Future research needs to involve a larger and more diversified panel of experts and apply hybrid or fuzzy MCDM approach to reduce the impact of experts' judgmental uncertainty (Trung & Thanh, 2022). Future research should also focus on differences between sectors, sizes of businesses, regions, and levels of digitalization as well as adding more criteria like cost of acquisition, conversion, privacy, scalability, ROI, and customer retention. The results of the AHP analysis should be verified with the real-world examples of digital marketing performance. In general, future research needs to further develop the prioritization framework of digital marketing for MSMEs.

Declaration

Author Contribution

All authors contributed equally as the main contributors of this paper. All authors read and approved the final paper.

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Competing Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

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