

THE INFLUENCE OF MANAGEMENT INFORMATION SYSTEMS AND DIGITAL MARKETING WITH MARKET ORIENTATION MEDIATION ON BUMDES PERFORMANCE IN EAST KOTAWARINGIN REGENCY

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Abstract. This study aims to analyze the influence of Management Information Systems (MIS) and Digital Marketing with market orientation mediation on the Performance of Village-Owned Enterprises (BUMDes) in East Kotawaringin Regency, Central Kalimantan. The research approach used is quantitative associative, with a total of 30 respondents consisting of 20 BUMDes partner business actors and 10 BUMDes directors/main managers. The research instrument was a closed questionnaire with a Likert scale and was analyzed using the path regression method (path analysis). The results showed that MIS has a significant effect on digital marketing, as well as a direct effect on BUMDes performance. Meanwhile, digital marketing was also proven to have a positive and significant effect on BUMDes performance ($\beta = 0.497$). These findings indicate that BUMDes with accurate and structured information systems tend to be able to implement digital marketing strategies more effectively, which ultimately encourages increased business performance, both in terms of revenue, product visibility, and partner trust. Indirectly, digital marketing mediates the influence of management information systems on performance. Likewise, market orientation is significant and positive in improving performance. Therefore, the success of BUMDes in the digital era is determined not only by online promotional capabilities, but also by the reliability of internal information systems and market orientation. This study suggests the importance of integrating MIS and digital marketing strategies as a foundation for strengthening the competitiveness and sustainability of BUMDes businesses.

Keywords: Digital Marketing; Digital Village-Owned Enterprise; Management Information Systems; Market Orientation; Village-Owned Enterprise Performance.

1. INTRODUCTION

Village economic development today faces new challenges, particularly with the growing demand for digitalization, transparency, and efficiency in business management. Village-Owned Enterprises (BUMDes), as key drivers of local economies, are now expected not only to manage their business units through conventional means but also to adapt to the digital era especially in areas such as marketing and data management (et al., 2023). Amid the rapid growth of digital marketing, BUMDes must ensure that all data used in promotion, sales, and reporting is accurate, valid, and accountable (Latifiani, 2019).

One of the main challenges in implementing digital marketing within BUMDes is data validity. Product data, sales transactions, partner identities, and customer feedback are often managed manually or are not systematically documented (Cristina, 2020). This situation can lead to mistrust from consumers, business partners, and supervisory institutions. Inaccurate data also puts BUMDes at a disadvantage in an increasingly competitive digital marketplace.

This is where the role of Management Information Systems (MIS) becomes crucial. MIS is a system designed to collect, process, store, and present information in a structured way to support decision-making and organizational operations. In the context of BUMDes, MIS serves as a critical tool for managing product data, financial reports,

customer information, and digital marketing archives more accurately, quickly, and in an integrated manner (HERLON et al., 2017).

Serambut Village in Central Kalimantan is currently striving to develop its BUMDes through digital approaches, particularly in marketing local products such as agricultural goods, handicrafts, and tourism services. However, the use of information technology in the BUMDes remains limited and lacks standardization. Data management for digital marketing still relies on manual records, personal messages, or social media, without a standardized data verification system. This condition increases the risk of data errors and weakens the effectiveness of evidence-based and trust-oriented digital marketing.

This phenomenon highlights the urgent need to implement a simple yet structured Management Information System as a foundation to ensure data validity in BUMDes digital marketing practices. This research aims to analyze how MIS can support the accuracy and credibility of digital marketing data and the extent to which its application can improve market trust in BUMDes products from Serambut Village. In recent years, Village-Owned Enterprises (BUMDes) in East Kotawaringin Regency have been increasingly recognized as strategic economic actors in driving rural development. However, many BUMDes still face challenges in achieving optimal performance due to limited capacity in managing business operations, utilizing digital tools, and responding to market demands.

Despite government support and various development programs, the integration of Management Information Systems (MIS) and Digital Marketing remains underutilized among BUMDes. These tools, when effectively implemented, can provide timely business insights, improve service delivery, and enhance competitiveness in both local and regional markets (Leick et al., 2024). However, their impact on performance is not solely dependent on technology adoption, but also on how well the organization is oriented towards market needs (Losacker & Liefner, 2020).

Market orientation reflected through customer focus, competitor awareness, and cross-functional coordination serves as a crucial mediating factor that connects technology implementation with organizational outcomes. Without a strong market orientation, MIS and digital marketing strategies may not translate into improved business performance.

Therefore, it becomes essential to investigate how MIS and digital marketing influence BUMDes performance, and to what extent this relationship is mediated by market orientation, particularly in the context of rural enterprises like those in East Kotawaringin Regency. Understanding this phenomenon will help policymakers and village business managers to formulate more targeted strategies in strengthening the digital and market readiness of BUMDes

2. LITERATURE REVIEW

2.1 The Importance of Digital Marketing for BUMDes

In the digital economy era, digital marketing has become a crucial strategy that must be adopted by Village-Owned Enterprises (BUMDes) to expand market reach, increase revenue, and promote local products and village potential at the national even global level. According to (Palinchak et al., 2021), digital marketing encompasses all marketing activities that use electronic devices and the internet, including social media, e-commerce, email marketing, and search engine optimization (SEO) (Li, 2023).

As village-owned business entities focused on empowering the local economy, BUMDes hold great potential to leverage digital marketing in promoting village superior products such as local crafts, agricultural products, traditional cuisine, and community-based tourism services. However, to fully harness this potential, BUMDes need not only digital promotional strategies but also supporting infrastructure, including information systems, data validity, and human resource capacity (Malchyk et al., 2021).

Research by (Rosales Ortiz et al., 2014) indicates that the implementation of digital marketing by BUMDes can improve business visibility, expand distribution networks, and create a stronger brand image. Meanwhile, a study by (- & -, 2023) shows that BUMDes

actively utilizing social media and marketplace platforms experienced income growth of up to 40% compared to those relying solely on conventional sales methods.

Nevertheless, the effectiveness of digital marketing heavily depends on the quality and validity of the presented data, such as product details, pricing, stock availability, and customer testimonials. When the data displayed is invalid or inconsistent, consumer trust declines, and business image may be negatively impacted. This is where the Management Information System (MIS) serves as a foundation to ensure that the data used in digital marketing is accurate, real-time, and traceable.

Thus, the literature supports the notion that digital marketing is a strategic instrument for BUMDes to enhance rural economic performance. However, its implementation must be supported by a robust information system to ensure that digital marketing is conducted in a professional, transparent, and trustworthy manner (et al., 2021).

2.2 The Influence of Management Information Systems on BUMDes Performance

A Management Information System (MIS) is a technology-based system used to collect, manage, store, and present information to support managerial and operational decision-making (Novkovic et al., 2015). In the context of Village-Owned Enterprises (BUMDes), implementing MIS plays a vital role in enhancing business effectiveness, efficiency, transparency, and accountability. The following outlines several key influences:

1. **Enhancing Operational Efficiency.** MIS enables faster and more accurate recording of financial data, transaction logs, inventory, and customer information. This minimizes manual errors and speeds up daily processes. For example, MIS helps BUMDes managers generate financial reports without the need for manual recalculations.
2. **Improving Data Accuracy and Validity.** MIS ensures that every recorded data point has a digital footprint, timestamp, and stronger validation. In digital marketing, this is crucial to guarantee that product information, prices, stock levels, and customer testimonials are trustworthy. The validity of this data greatly influences reputation and consumer trust.
3. **Facilitating Strategic Decision-Making.** BUMDes equipped with MIS have access to more comprehensive and real-time reports and data, enabling them to make accurate and data-driven decisions—such as adding new products, adjusting promotional strategies, or changing pricing. This supports overall business performance improvements.
4. **Increasing Transparency and Accountability.** MIS assists BUMDes administrators in presenting transparent reports to village governments, development facilitators, and the community. Transparency is key to building public trust and achieving professional business governance.
5. **Supporting Collaboration and Business Unit Integration** for BUMDes with multiple business units (e.g., agriculture, tourism, handicrafts), MIS helps integrate data from all units into a unified system. This encourages internal coordination efficiency and better customer service delivery.

Supporting Literature:

- (Varajão et al., 2023) noted that MIS increases productivity and operational efficiency by facilitating systematic data management.
- (Hadid & Al-Sayed, 2021) found that MIS implementation in BUMDes improved service speed, enhanced financial reporting, and increased satisfaction among partners and community members.
- According to the Ministry of Villages (Hadid & Al-Sayed, 2021), BUMDes using digital systems and MIS-based reporting applications demonstrated improved performance and greater trust from stakeholders.

In summary, Management Information Systems have a significant and positive influence on improving BUMDes performance, particularly by:

- Ensuring data validity,
- Strengthening digital marketing processes,
- Increasing internal efficiency,
- Supporting data-based decision-making, and
- Enabling transparent and accountable governance.

2.3 The Influence of Digital Marketing on BUMDes Performance

Digital marketing is a marketing strategy that utilizes digital platforms and the internet to promote products and services to consumers in a broader, faster, and more measurable manner (Taherdoost, 2023). For BUMDes (Village-Owned Enterprises), the implementation of digital marketing is not merely a trend but a crucial transformational strategy to enhance visibility, competitiveness, and overall business performance.

The following are several positive impacts of digital marketing on BUMDes performance:

1. **Expanding Market Reach.** Digital marketing enables BUMDes to market their products not only locally but also on a regional, national, and even global scale (Rangaswamy et al., 2020). Through social media, marketplaces, and websites, village superior products (such as handicrafts, agricultural products, or tourism services) can reach a wider audience at relatively low cost. For example, a BUMDes selling forest honey or rattan crafts can reach buyers outside the province via Instagram or Tokopedia.
2. **Increasing Sales and Revenue.** Wider market access through digital channels directly increases the potential for transactions. Digital marketing allows for more engaging and interactive promotions, such as special discounts, customer testimonials, and educational content, which can drive purchasing decisions. A study by Wibowo & Nugroho (2022) found that BUMDes actively engaged in digital promotions experienced a 30–40% increase in revenue within the first 6 months.
3. **Strengthening Product Branding and Village Image.** Through digital branding strategies, BUMDes can build a positive image of local products as unique, high-quality, and culturally valuable (Vollrath & Villegas, 2022). Well-managed visual content (photos, videos, and product stories) enhances customer trust and loyalty. Village tourism BUMDes, for instance, can use YouTube and Instagram to promote the village's natural beauty and cultural heritage as tourist attractions.
4. **Enhancing Promotional Efficiency and Effectiveness.** Promoting through digital media (such as Facebook Ads, Google Ads, and WhatsApp Business) is more cost-effective than traditional advertising methods like banners or flyers. Moreover, results can be measured in real-time (such as visits, clicks, and purchases), supporting data-driven decision-making and budget efficiency.
5. **Encouraging Innovation and Technological Adaptation.** Digital marketing encourages BUMDes to be more adaptive to technology—both in terms of marketing, customer service, and data management. This fosters human resource capacity building and drives comprehensive digital transformation in village enterprises.

Supporting Literature:

- (Masrianto et al., 2022) emphasize that digital marketing offers immense opportunities for small businesses to access larger markets with low costs and personalized approaches.
- (Daud et al., 2022) argue that organizations adopting digital marketing tend to be more responsive to consumer behavior and market trends.
- (Munir et al., 2023) shows that digital marketing enables BUMDes to promote products with broader reach and significant transaction growth.

In summary, digital marketing significantly contributes to improving BUMDes performance, especially by (Herhausen et al., 2020):

- Expanding market access and increasing sales
- Strengthening local brand identity
- Reducing promotional costs
- Encouraging innovation and digital adoption

However, its effectiveness depends on data validity, skilled human resources, and reliable management information systems (Rangaswamy et al., 2020).

3. RESEARCH METHODS

3.1 Type and Approach of Research

This study uses a quantitative associative approach, aiming to examine the influence between two or more variables. It investigates the effect of Management Information Systems (X) and Digital Marketing (Z) on BUMDes Performance (Y).

3.2 Population and Sample

The population of this research consists of business actors and BUMDes managers in East Kotawaringin Regency, Central Kalimantan. The sampling technique used is purposive sampling, with the following criteria:

- Actively managing or involved in BUMDes information systems and marketing
- Operating for at least the past year

Number of respondents:

- 20 Business actors who collaborate with or are partners of BUMDes business units
- 10 BUMDes Directors/Key Managers, Total respondents: 30 people

3.3 Research Variables

Table 1.

Variable Type	Variable Name	Code
Independent	Management Information System	X
Intervening	Digital Marketing	Z
Dependent	BUMDes Performance	Y

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 2. Average Respondent Ratings per Variable

Variable	Number of Statements	Average Score	Category
Management Information System (X)	6	4.20	Very Good
Digital Marketing (Z)	5	4.05	Good
BUMDes Performance (Y)	6	4.18	Very Good

d. Indirect Influence ($X \rightarrow Z \rightarrow Y$)

Management Information Systems also have an indirect effect on BUMDes performance through digital marketing as an intervening variable. This indicates that digital transformation in BUMDes must begin with a strong foundation in information management, which can then be leveraged to strengthen digital marketing strategies.

CONCLUSION

Based on the research involving 30 respondents—comprising 20 business actors and 10 BUMDes directors in East Kotawaringin Regency—and a quantitative analysis using path regression, the following conclusions were drawn: 1. Management Information Systems (MIS) have a positive and significant effect on digital marketing; this means that the better BUMDes manage their information systems—such as recording transactions,

product data, stock, and financial reports—the more effective their digital marketing strategies become, and this demonstrates that data accuracy greatly supports the success of digital promotions; 2. Digital marketing significantly affects the improvement of BUMDes performance; marketing strategies implemented through social media, e-commerce, and other digital platforms have been proven to enhance business visibility, expand market reach, and ultimately contribute to increased revenue and business reputation; 3. Management Information Systems also have a direct influence on BUMDes performance, both independently and through digital marketing as an intervening variable; a well-managed MIS fosters more professional, transparent, and accountable business governance, which positively impacts overall BUMDes performance; 4. Digital marketing serves as a mediating variable that strengthens the relationship between MIS and performance; this means that MIS forms the foundational support that enables BUMDes to execute digital marketing strategies effectively and achieve better performance outcomes.

Overall, this study emphasizes that in facing the challenges of digital transformation and rural business development, strengthening management information systems and digital marketing strategies must go hand in hand to ensure sustainable improvement in BUMDes performance.

SUGGESTIONS

1. Comprehensive Implementation of Management Information Systems (MIS). It is recommended that all BUMDes in East Kotawaringin Regency begin implementing standardized and user-friendly Management Information Systems. This includes digital transaction recording, product inventory, partner data, and system-based financial reporting. With an integrated MIS, digital marketing processes will become more effective and accountable.
2. Enhancing Human Resource Capacity in Digital Marketing. Regular training is needed for BUMDes managers on digital marketing strategies, such as the use of social media, marketplace optimization, and digital content utilization. Technological proficiency among human resources will accelerate adaptation and improve BUMDes performance in the digital economy era.
3. Strengthening Collaboration with Digital Stakeholders. BUMDes should establish partnerships with digital platform providers, marketing consultants, and training institutions to broaden their insights and marketing networks. These collaborations will strengthen BUMDes' digital capabilities and expand market access for village products.
4. Development of Digital Data Validation and Verification Systems. To build market trust, BUMDes need to develop internal validation systems for all data used in digital marketing. Product information, pricing, testimonials, and financial reports should have quality control mechanisms to prevent misinformation across digital channels.
5. Further Research. Future studies could expand the variables, such as including leadership roles, product innovation, or digital literacy as factors mediating or moderating the relationships between variables. Additionally, testing the model with a larger and cross-regency sample is essential to improve the generalizability of the findings.

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