



Analysis of Utilization *E-Commerce* as a Management Information System to Support MSME Performance

Analisis Pemanfaatan E-Commerce sebagai Sistem Informasi Manajemen untuk Mendukung Kinerja UMKM

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Abstrak

Kemajuan teknologi telah mendorong Usaha Mikro, Kecil, dan Menengah (UMKM) untuk mengadopsi e-commerce sebagai platform untuk menjalankan bisnis. Melalui e-commerce, pemilik bisnis tidak hanya dapat menampilkan dan memasarkan produk mereka, tetapi juga mengelola data bisnis dan membuat keputusan manajerial yang lebih efektif. Artikel ini membahas peran e-commerce sebagai sistem informasi manajemen dalam meningkatkan kinerja UMKM. Dengan menggunakan metode tinjauan pustaka berdasarkan berbagai jurnal ilmiah dan buku akademik, penelitian ini menemukan bahwa e-commerce secara signifikan meningkatkan efisiensi manajemen data. Selain memperluas jangkauan pasar dan mempercepat proses transaksi, e-commerce juga membantu mengurangi biaya operasional. Lebih lanjut, UMKM dapat memantau data penjualan secara real-time dan memperoleh pemahaman yang lebih baik tentang preferensi dan kebutuhan pelanggan. Kesimpulannya, memanfaatkan e-commerce sebagai sistem manajemen data terpusat merupakan strategi yang efektif untuk memungkinkan UMKM tetap kompetitif di era digital.

Kata Kunci: Sistem Informasi Manajemen, E-commerce, UMKM

Abstract

Technological advancements have encouraged Micro, Small, and Medium Enterprises (MSMEs) to adopt e-commerce as a platform for conducting business. Through e-commerce, business owners can not only display and market their products but also manage business data and make more effective managerial decisions. This article discusses the role of e-commerce as a management information system in improving MSME performance. Using a literature review method based on various scientific journals and academic books, the study found that e-commerce significantly enhances the efficiency of data management. In addition to expanding market reach and accelerating transaction processes, e-commerce also helps reduce operational costs. Furthermore, MSMEs can monitor sales data in real time and gain a better understanding of customer preferences and needs. In conclusion, utilizing e-commerce as a centralized data management system is an effective strategy for enabling MSMEs to remain competitive in the digital era.

Keyword: Management Information Systems, E-commerce, MSMEs

INTRODUCTION

The development of information technology has brought significant changes in various fields, including the business world. Increasingly competitive business environments encourage every business actor to adapt to technological developments to maintain and enhance their competitiveness (Fitriani & Hwihanus, 2023). One form of rapidly developing technology



utilization *ise-commerce*, namely media that enables marketing, sales and transaction processes to be carried out electronically via the internet network.

Utilization *e-commerce* not only makes transactions easier, but also helps business owners manage their business activities more effectively. Through the platform *e-commerce*, business owners can market products to a wider consumer base, manage transaction data, monitor sales progress, and obtain useful information for decision-making. *E-commerce* is no longer seen only as a means of buying and selling, but also as part of a system that supports business information management.

Micro, Small, and Medium Enterprises (MSMEs) are a sector that significantly contributes to the Indonesian economy. Their existence plays a role in creating jobs, increasing community income, and driving national economic growth (Nur Fitriana et al., 2025). Despite this, many MSMEs still face various obstacles, such as limited market access, suboptimal information management, and low utilization of digital technology in their business activities.

In facing these various challenges, implementing a Management Information System (MIS) is one solution that can help MSMEs manage information in a more structured manner. MIS plays a role in collecting, processing, storing, and presenting the information needed to support the decision-making process. According to Fitriani and Hwihanus (2023), management information systems play a crucial role in supporting development *e-commerce* and help MSMEs make business decisions more effectively.

In addition to functioning as a marketing medium, *e-commerce* It can also support the management of business data, such as customer data, sales transactions, inventory, and the preparation of more systematic business reports. This available information can be used as a basis for evaluating business development and developing business strategies that align with market needs. Thus, the use of *e-commerce* as part of the Management Information System, it is expected to be able to increase operational effectiveness while strengthening the competitiveness of MSMEs in the digital era.

Based on this description, this study aims to analyze the utilization of *e-commerce* as a Management Information System to support the performance of MSMEs. Through this research, it is hoped that an overview of the role, benefits, and various challenges in implementing *e-commerce* so that it can be a reference for MSMEs in optimizing the use of digital technology to develop their businesses.

LIBRARY REVIEW

1. Management Information System (MIS)

A Management Information System (MIS) is a system that integrates people, technology, and work procedures to collect, process, store, and present information needed in an organization's management processes. The resulting information must be accurate, relevant, and timely so that it can be used as a basis for planning, control, and decision-making.

For Micro, Small, and Medium Enterprises (MSMEs), the existence of an MIS is crucial because it can increase the effectiveness and efficiency of operational activities. Through an organized system, various business data such as sales, inventory, and customer information can



be better managed, making it easier for entrepreneurs to monitor their business development (Rahmadhan et al., 2025).

Fitriani and Hwihanus (2023) explain that Management Information Systems have an important role in supporting development of *e-commerce* while also helping MSMEs obtain the information they need to make faster and more accurate business decisions. Thus, implementing MIS is a key factor in successful business management in the digital era.

2. E-commerce

E-commerce is a trading activity conducted through electronic media, particularly the internet, allowing marketing, purchasing, selling, and payment processes to be conducted online. This technology offers convenience for both consumers and businesses, as transactions can be conducted without the constraints of distance and time (Santoso et al., 2022).

Apart from simplifying the transaction process, *e-commerce* It also provides opportunities for MSMEs to expand their market reach, increase competitiveness, and improve the quality of customer service. *E-commerce* has changed the way business actors conduct business by utilizing digital technology as the main means in trading activities (Sari & Firdaus, 2024).

In practice, *e-commerce* it is not only used as a sales medium, but also as a means of managing transaction data, product marketing, communicating with customers, and providing information that supports business decision-making. Therefore, *e-commerce* become one form of technological innovation that plays an important role in the development of the business world.

3. Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small, and Medium Enterprises (MSMEs) are productive business groups run by individuals or business entities on a smaller scale than large corporations. MSMEs significantly contribute to the national economy by creating jobs, increasing incomes, and driving economic growth (Ramadhan et al., 2025).

Amidst the increasingly rapid development of information technology, MSMEs are required to adapt to these changes to remain competitive. One form of adaptation that can be done is utilizing digital technology, particularly *e-commerce*, as a marketing medium as well as a means of managing a business more effectively and efficiently.

4. Relationship *E-commerce* with Management Information System (MIS)

E-commerce is closely related to Management Information Systems because the various activities taking place within the platform generate data that can be used as information for businesses. Data on sales transactions, inventory, customer behavior, and even financial reports can be processed into useful information for decision-making (Sari & Firdaus, 2024).

Through utilization *e-commerce*, MSMEs can monitor their business development more accurately, identify consumer needs, evaluate sales performance, and develop business strategies based on available data. *e-commerce* not only functions as an electronic trading facility, but also becomes part of a Management Information System that is able to increase operational effectiveness and support the improvement of MSME performance.



RESEARCH METHODS

This research uses a literature study method with a qualitative descriptive approach. Data were obtained from various sources, such as scientific journals, books, articles, and other references related to the topic. *e-commerce*, Management Information Systems (MIS), and MSMEs. Next, the collected data was analyzed descriptively to determine how the utilization of *e-commerce* as a Management Information System to support MSME performance. The results of the analysis are then compiled systematically to provide an overview of the role, benefits, and challenges of implementing it. *e-commerce* on MSMEs in the digital era.

RESULTS AND DISCUSSION

Utilization of E-Commerce in MSMEs

E-commerce is the activity of buying and selling goods, services, and information carried out via the internet network (Triandaru, 2023). Utilization of *e-commerce* provides opportunities for MSMEs to develop their businesses, expand their markets, and increase the effectiveness of their business activities. With digital technology, MSMEs can market their products more easily and reach a wider consumer base, even internationally (Kemenkeu.go.id, 2019).

The development of information technology has also encouraged the presence of social media and *marketplace* as a digital marketing tool for MSMEs. Social media is used as a promotional and communication medium with consumers, while *marketplace* used as a platform for buying and selling transactions *online* (Manurung & Juliana Putri, 2025). Utilizing these digital platforms helps MSMEs improve marketing, expand market reach, and support business sustainability in the digital era.

1. Social media

Social media is a platform for interaction that brings together individuals and business organizations, both in the roles of consumers and producers. This interaction can take various forms, such as exchanging texts, sharing images, distributing videos, and building broader communication networks (Rahmah et al., 2022).

Social media isn't just used by internet users for socializing, it's also used for business. Social media platforms like Facebook, Instagram, TikTok, and WhatsApp have become powerful promotional tools for MSMEs. Through creative content, branding strategies, and the use of digital advertising features, MSMEs can build their product image while increasing consumer engagement.

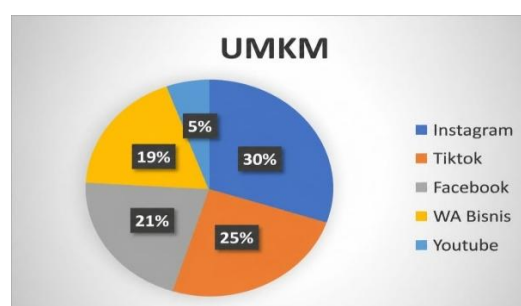


Figure 1. Social Media Diagram



Based on Figure 1, Instagram is the most widely used social media platform by MSMEs, accounting for 30% of its features due to its ease of use and familiarity. TikTok is in second place, accounting for 25% of its popularity for promotions, despite restrictions on the TikTok Shop transaction feature. Facebook is used at 21%, but is starting to decline due to the decline in teenage users. WhatsApp Business accounts for 19% of its use, making it easier for consumers to directly access product and pricing information. Meanwhile, YouTube accounts for only 5% due to its more complex content creation process. Overall, social media helps MSMEs promote, expand market reach, and build relationships with customers.

2. Marketplace

Marketplace is a platform designed to simplify business processes, creating efficiency and effectiveness in buying and selling activities. This digital marketplace is not bound by geographical, spatial, or time constraints, allowing anyone to conduct transactions anytime, anywhere. This system makes buying and selling easier, faster, and more cost-effective for both sellers and buyers (Hadi et al., 2023).

Marketplace platforms such as Tokopedia, Shopee, Bukalapak, and Lazada provide a more structured ecosystem for buying and selling transactions. *Marketplace* lies in an integrated system, ranging from product catalog management, secure payment methods, to logistics support. *Marketplace* provides a great opportunity for MSMEs to reach a wider consumer base without being limited by geographic area. In addition, *marketplace* also offers various promotional programs that MSMEs can utilize to increase sales (Saputri et al., 2023).

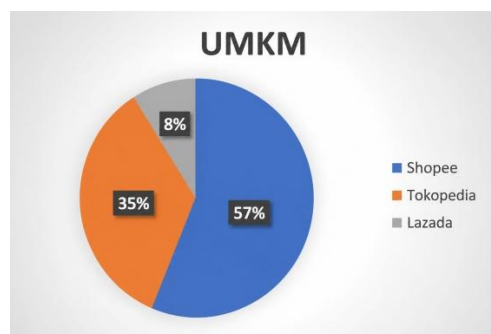


Figure 2. Diagram *Marketplace*

Based on Figure 2, it can be seen that language is used in its utilization. *marketplace* Among MSMEs, Shopee is the most dominant platform used with a percentage of 57%. This figure shows that Shoopee is seen as the main choice compared to other platforms. *Marketplace* other platforms are considered more popular, easier to access, and offer features that support practical buying and selling activities. Meanwhile, Tokopedia ranks second with 35%, still quite widely used, although lower than Shopee. Lazada only achieved 8%, indicating its relatively small usage and not yet a primary choice for most MSMEs. These findings demonstrate a clear preference among business owners when choosing an online platform. *Marketplace* as their digital marketing channel.

Besides *marketplace* and social media, some MSMEs also utilize online shops as a digital sales tool. *Storeonline* allows business owners to manage products, transactions, and customer information independently through a website or specific application. With the



existence of a store *online*, MSMEs can build a more professional brand identity and increase consumer trust.

The Role *E-commerce* as a Management Information System

E-commerce not only functions as a marketing and product sales medium, but also has an important role as a management information system in MSME business activities. *E-commerce*, business actors can manage various business information more easily, quickly, and in an organized manner. According to Fitriani and Hwihanus (2023), management information systems play a crucial role in assisting information management and business decision-making in MSMEs.

One form of role *e-commerce* As a management information system, it helps manage customer data. Through the platform *e-commerce*, businesses can automatically store customer information such as names, contact details, purchase history, and consumer reviews within the system. This data helps MSMEs understand customer needs and improve service quality. Arianto and Sofyan (2022) explain that utilizing digital technology helps businesses understand consumer needs and behavior more quickly and accurately.

Besides that, *e-commerce* it also helps manage business transactions. The entire transaction process, from ordering to payment, can be recorded automatically, making it easier for business owners to control sales activities. According to Santoso et al. (2022), the use of *e-commerce* making the transaction process easier, faster and more efficient for both business actors and consumers.

E-commerce it also plays a role in sales monitoring because MSMEs can see sales developments, the most popular products, and the number of transactions in real time. This information helps businesses determine more effective and targeted business strategies. In addition to assisting with sales monitoring, *e-commerce* it also simplifies the preparation of business reports. Digitally stored transaction data makes sales reports and business records more organized, accessible, and efficient. With this digital system, MSMEs can conduct business evaluations more regularly and effectively.

Impact of E-Commerce on MSME Performance

Utilization *e-commerce* have a significant impact on MSME performance, particularly in increasing sales, expanding markets, and supporting business effectiveness. With digital platforms, MSMEs can conduct business processes more easily, quickly, and efficiently. (JURMA: Journal of Management Research, 2024).

The impact can be seen from the following aspects:

1. Access to a Larger Market

E-commerce providing MSMEs with access to a broader market, even at the national and international levels. Through digital platforms, businesses can sell their products to a wider audience without being limited by geographic location. This helps increase sales opportunities and business growth.

2. Reduction of Operational Costs



Usage *e-commerce* it helps MSMEs reduce operational costs such as store rent, promotions, and business administration. Furthermore, most business activities can be conducted digitally, making business processes more efficient and practical.

3. Marketing Skills

E-commerce enables MSMEs to utilize various digital marketing strategies such as social media and advertising *online* with digital marketing, businesses can reach more customers and introduce products more effectively at a lower cost.

4. Deep Data Analysis

Platform *e-commerce* providing customer and sales data can help MSMEs understand consumer behavior, identify the most popular products, and determine more appropriate business strategies. This data analysis helps businesses improve marketing and sales effectiveness.

5. Brand Development and Customer Trust

E-commerce helps MSMEs build brand image and increase customer trust through a product review and rating system. Furthermore, easier communication with consumers also helps increase customer satisfaction and loyalty towards MSME products.

Obstacles and Challenges

Although *e-commerce* While it provides many benefits for MSMEs, in its implementation, business actors still face various obstacles and challenges. These obstacles can affect the effectiveness of its use. *E-commerce* in supporting the development of MSMEs. Some of the obstacles and challenges are as follows:

1. Lack of Digital Literacy

There are still many MSME actors who do not have sufficient skills and understanding regarding the use of digital technology and *e-commerce*. Limited digital skills cause business actors to experience difficulties in managing *marketplace*, social media, and digital marketing (Hafiza, 2023).

2. Capital Limitations

Implementation *e-commerce* requires costs for technological devices, internet access, digital promotion, and business management *online* financial limitations are one of the obstacles for MSMEs in undergoing digital transformation (Hafiza, 2023).

3. Rapid Technological Development

The rapid development of digital technology requires MSMEs to continually adapt to new systems and platforms. However, limited knowledge and resources make it difficult for some businesses to keep up with these technological developments.

4. Digital Infrastructure Limitations

Not all areas have adequate internet access and digital infrastructure to support activities. *E-commerce* this situation presents an obstacle for MSMEs, especially those in areas with limited technological facilities.



5. Digital Market Competition

Development *e-commerce* this has led to increasingly fierce business competition as many businesses sell similar products through digital platforms. Therefore, MSMEs are required to be more creative and innovative to maintain their competitiveness in the digital marketplace.

CONCLUSION

Based on the research results, it can be concluded that the use of *e-commerce* has a very important role in supporting the development of MSMEs in the digital era. *E-commerce* not only used as a medium to sell products *online*, but also functions as a management information system that helps business actors manage customer data, record transactions, monitor sales, and compile business reports more easily and regularly.

Use of social media, *marketplace*, and online shops proven to expand market reach, increase marketing effectiveness, reduce operational costs, and help MSMEs make business decisions based on available data. Thus, the implementation of *e-commerce* can improve the performance and competitiveness of MSMEs amidst increasingly tight business competition.

However, the implementation *e-commerce* still faces several obstacles, such as low digital literacy, limited capital, rapid technological development, uneven digital infrastructure, and high competition in the digital market. Therefore, it is necessary to improve the digital capabilities of MSMEs and provide support from various parties to ensure the utilization of *e-commerce* can run optimally and provide greater benefits for business development.

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