

DIGITAL ACCOUNTING AND E-COMMERCE EMPOWERMENT: ENHANCING MILLENNIAL AND GEN Z MSME COMPETITIVENESS IN CULINARY SECTOR

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Abstract

This study investigates the impact of digital accounting systems and *E-commerce* platforms on the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) managed by Millennials and Generation Z, particularly in the culinary sector of Malang City. Although MSMEs are essential to Indonesia's economy, numerous enterprises still employ traditional approaches in financial administration and marketing. Due to the swift progression of technology, younger entrepreneurs, who are typically more digitally proficient, possess considerable potential to utilize solutions that enhance business efficiency and market competitiveness. Digital accounting entails the integration of technology into financial recordkeeping and analysis, allowing MSMEs to access real-time, accurate financial information that fosters greater transparency and operational efficiency. Simultaneously, *E-commerce* platforms provide MSMEs the opportunity to expand their market reach, reduce operational costs, and improve product exposure. The incorporation of these digital tools is expected to enhance MSMEs' competitiveness in the current rapid business landscape. A quantitative research methodology will be utilized, incorporating questionnaires aimed at proprietors of culinary MSMEs in Malang City, supplemented by interviews to obtain comprehensive insights into the advantages and challenges of digitalization. This study aims to elucidate the influence of digital technologies on MSME competitiveness and to guide entrepreneurs and policymakers in fostering MSME growth in the digital era. The findings are anticipated to enhance future academic study and bolster the local economic development of Malang City. This study applies samples from Malang city, a city in East Java, as the most developed culinary area in Indonesia. Other cities globally may take benefits from this study's results.

Keywords: Digital Accounting, Competitiveness, Digitalization, *E-commerce*, MSMEs.

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INTRODUCTION

Particularly in underdeveloped countries like Indonesia (Ausat & Peirisal, 2021) Micro, Small, and Medium Enterprises (MSMEs) play a vital position inside the economic system. Apart from greatly boosting the GDP, this industry is a major source of employment for most of the people. Because of their tenacity in overcoming market instability and economic downturns, MSMEs are usually seen as the cornerstone of the national economy (Costa & Castro, 2021). MSMEs today have a significant difficulty among the accelerating digital transformation: how to raise their operational efficiency and competitiveness to prevent being left behind (Plekhanov et al., 2023).

Although MSMEs are known to be flexible and adaptive, many businesses still use traditional approaches, such as manual financial records and conventional marketing strategies (Harahap et al., 2023). Recently, Millennials and Gen Z are starting to take over the role of managing MSMEs. They are more open to change and familiar with technology, making digital-based business management a logical and strategic choice (Hizbul Khootimah Azzaakiyyah, 2023).

As awareness of the importance of accurate financial management increases, more and more MSME players are realizing the importance of accounting systems (Gadzali et al., 2023). Accounting provides a real picture of the financial condition of the business (Raharjo et al., 2023). However, MSME players from the younger generation often do not have an adequate understanding of conventional accounting, because they are more focused on product innovation and marketing (Prastyaningtyas et al., 2023).

Digital accounting comes with as solution for MSME. Technology-based accounting enables automatic transaction recording, cash monitoring, and preparation of real-time cloud-based financial reports (Sariwulan, 2020). This solution is very suitable for the character of digital native generations such as Millennials and Gen Z (Almaududi Ausat & Suherlan, 2021).

Concurrent with this development of *E-commerce* has fundamentally changed company operations. By use of digital channels, MSMEs can reach larger markets, reduce running costs, and give consumers more ease in transactions (Gao et al., 2023). These advances highlight the great possibilities of technology in improving the competitiveness of MSMEs by usefulness of digital accounting and *E-commerce*.

The use of business digitalization in the MSME sector in Indonesia has seen a significant increase (INDEF, 2024). One of the main reasons MSMEs implement business digitalization is because of its practicality, which allows them to run their businesses anywhere. Dampak positif dari penggunaan platform digital juga terlihat dalam peningkatan kinerja UMKM (INDEF, 2024).

However, while existing literature has explored digital accounting and *E-commerce*, many studies tend to examine these aspects in isolation. For instance, research by Raharjo et al. (2023) primarily focuses on how digital accounting improves the financial transparency of MSMEs, without exploring its interaction with digital marketing tools. Conversely, the study by Gao et al. (2023) investigates how *E-commerce* facilitates market expansion and boosts sales, yet fails to address its connection with financial management systems. Previous studies conducted by Sariwulan (2020) have examined the impact of customization strategies on company performance with management accounting information systems as an intermediary variable in umrah travel agencies. The findings of this study indicate that both customization strategies and management accounting information systems have a positive influence on company performance. However, this study has limitations as it only focuses on the umrah travel agency sector, which has different business characteristics compared to SMEs, particularly in the culinary sector.

This reveals a research gap regarding the simultaneous application of accounting digitalization and *E-commerce*, particularly in efforts to enhance MSME competitiveness led by Millennials and Gen Z. Consequently, this study aims to bridge that gap by examining how the combined use of digital accounting and *E-commerce* contributes to the improved performance of culinary MSMEs in Malang City.

The urgency of this study results from the necessity to have a thorough knowledge of how younger generations use the synergy between financial technology and marketing technology to sustain and expand their companies among increasing market competition. Apart from improving academic debate, the results of this research are meant to be a useful manual for MSME practitioners and legislators in developing plans that increase the digital age MSME competitiveness (Harahap et al., 2023).

LITERATURE REVIEW

Resource Based View (RBV)

The Resource-Based View (RBV) was first introduced by Subagja (2023) as a strategic framework for developing businesses. This theory focuses on analyzing an organization's internal resources to create a sustainable competitive advantage (Miles and Darroch, 2006). The RBV approach emphasizes that both tangible and intangible corporate resources are key factors in determining business competitiveness and growth (Ray, 2012). Furthermore, RBV is used to identify a company's strategic advantage through a combination of physical assets, organizational capabilities, core competencies, and intangible assets.

In today's global business competition, RBV provides an important perspective by emphasizing the role of internal resources as the basis for achieving competitive advantage (Gao et al., 2023). In the dynamic digital era, companies do not only depend on external factors, but must also maximize internal potential to differentiate themselves from competitors. Advances in information and communication technology (ICT) require companies to utilize resources more strategically. Companies that have quality human resources, innovative technology, and strong managerial capabilities will be better able to adapt to market changes (Ray, 2012).

In the context of MSMEs, understanding and applying RBV is increasingly crucial given the limited capital and access to markets. The use of digital technology, such as accounting digitization and *E-commerce* platforms, is one strategy to strengthen the intangible assets owned by MSMEs (Gao et al., 2023). In addition, RBV also emphasizes the importance of organizational learning and adaptability as part of the dynamic capabilities that support MSMEs in facing rapid market changes.

Moreover, RBV emphasizes that the appropriate combination and use of resources by the organization determines not only their existence but also their successful application (Ray, 2012). Thus, the development of competent people resources and the use of suitable technology are deciding elements in raising the competitiveness of MSMEs. RBV thus offers a thorough framework to grasp how MSMEs could innovate and change in the face of globalization and digitization.

Technology Acceptance Model (TAM)

Introduced Technology Acceptance Model (TAM) presents a structure for comprehending user behavior around the acceptance and usage of technology. This approach concentrates on two major constructions: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), both of which

influence a person's attitude and intention toward implementing a given technology. While Perceived Ease of Use describes the degree to which the technology is thought to be easy to operate, Perceived Use is defined as the degree to which a person believes that utilizing a particular technology will improve their performance (Kraugusteeliana et al., 2022).

In terms of digital accounting and *E-commerce*, TAM is especially important in examining how MSME operators—especially those from the Millennial and Gen Z cohorts—embrace technology in their business operations. The acceptance and use of a technology are more likely depending on how beneficial and easy they seem to be (Ray, 2012). Empirical data also supports this, showing that the intention to employ such technologies for commercial reasons is much influenced by good opinions of user-friendliness in digital accounting tools and *E-commerce* systems (Long et al., 2023).

Using TAM in this research provides a theoretical perspective to assess the factors influencing the acceptance of digital technologies among MSME participants. Knowing these viewpoints helps stakeholders create focused plans including digital literacy initiatives, user-friendly system design, and awareness campaigns meant to increase technology adoption and maximize its effects on MSME competitiveness (Raharjo et al., 2023). Apart from the two main building blocks-Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

Because technology is developing so quickly, the TAM model must also be updated often to account for new, pertinent elements like social support, data security, and digital trust (Sagnier et al., 2020). These elements are particularly crucial for MSMEs, which frequently still struggle with technical knowledge and digital literacy. As a result, the TAM model's incorporation of these elements contributes to a more complete representation of the technology adoption process.

In research related to accounting digitization and *E-commerce*, the application of TAM must also consider the cultural context and demographic characteristics of users. Millennials and Gen Z are known as generations that are more open and quick to adapt to technology, but they also have high expectations of the ease and tangible benefits of the technology (Ray, 2012). Thus, digital technology introduction and implementation strategies must adapt to the needs and preferences of these generations in order to maximize adoption potential.

Furthermore, training and organizational support are crucial elements that can improve perceived ease of use, which lowers psychological and technical obstacles to technology use (Raharjo et al., 2023). MSMEs who get this kind of assistance typically integrate digital technology into their business processes more quickly and successfully. This study also emphasizes how crucial it is to continuously assess the technological systems in use to make sure they continue to be applicable and offer value additions in line with changing business and market demands.

Accounting Digitalization

Accounting digitalization is an important transformation in the business world that focuses on replacing traditional manual accounting methods with systems based on digital technology (Costa & Castro, 2021). This change is not just a replacement of tools, but a revolution in the way financial data is managed, reported, and business decisions are made. Basically, accounting digitization involves the use of accounting software that is capable of automatically recording transactions, managing ledgers, and preparing financial reports with a high level of accuracy and much better time efficiency than manual methods (Ausat & Peirisal, 2021).

One important aspect of this digitization is its ability to integrate various financial data spread across different departments into one unified system (Tolstoy et al., 2022). Thus, companies can get a real-time view of their financial position, which is crucial for strategic and operational

decision-making. Digitalization also allows remote access to financial data, so that management can monitor anytime and anywhere through mobile devices or computers (Sutrisno et al., 2023).

In addition, accounting digitization provides significant advantages in terms of reducing the risk of human error that often occurs in manual recording. Sophisticated digital systems can detect anomalies or data discrepancies automatically, thereby minimizing the potential for fraud and increasing the transparency of financial statements (Budilet al., 2024). In compliance, digitalization also helps companies meet increasingly stringent tax regulations and reporting standards, through automated features such as electronic tax reporting (e-filing) and report preparation according to the latest accounting standards (Chyzhevska et al., 2021).

Not only for large companies, accounting digitalization also opens up great opportunities for small and medium enterprises (SMEs) to better manage their finances (Agostino et al., 2022). With various accounting applications that are easily accessible and affordable, SMEs can now systematically record their finances, which in turn increases their credibility and competitiveness in the market. The use of accounting digitization also accelerates the process of internal and external audits, making it easier to evaluate financial performance and risk management (Long et al., 2023)

However, behind these various benefits, accounting digitization also faces challenges, especially related to technological adaptation and data security (Fauziyyah, 2022). The use of digital technology requires human resources who have competence in operating accounting software as well as an understanding of cybersecurity to protect company data from cyber attacks. Therefore, training and education in terms of digital literacy is needed so that the digitization process runs effectively and sustainably

Along with the previously listed advantages, accounting digitization also makes it possible for departments within the organization to work together more frequently. Coordination in financial planning and control is more efficient when departments can share financial data in real-time through an integrated digital system (Tolstoy et al., 2022). This is essential in light of rapidly shifting market conditions, when prompt and fact-based business decisions are required.

Financial analytics and Big Data concepts are also supported by accounting digitization. Large volumes of data can be gathered and processed by businesses to better understand consumer behavior, financial trends, and operational performance (Costa & Castro, 2021). As a result, management may develop more focused projections and strategic plans in addition to depending on historical reports.

Digitizing accounting is one of the most crucial empowering tools for MSMEs. Without employing professional accounting personnel, MSMEs can reduce operating expenses and expedite the reporting process by utilizing cloud-based accounting solutions (Jain et al., 2021). However, the readiness of human resources and a sufficient technology infrastructure are critical to the successful execution of this digitization.

However, one of the main concerns with accounting digitization is data security issues. Cyberattacks and data leaks pose a deadly threat to company continuity and reputation (Ray, 2012). To protect financial data, businesses must implement stringent security procedures and upgrade their systems frequently. Maintaining the integrity of digital accounting systems also requires ongoing cybersecurity and user awareness training (Rita et al., 2019).

E-commerce

The global trend known as "*E-commerce*," or "electronic commerce," has changed how companies function and how customers make purchases (Plekhanov et al., 2023). *E-commerce*

makes it possible to buy and sell goods and services online without being limited by time or place thanks to developments in digital communication and internet technologies. In addition to spurring company growth, its quick development has created a vibrant digital ecosystem with a variety of business models, including consumer-to-business (C2B), business-to-business (B2B), business-to-consumer (B2C), and business-to-business (C2B) (Long et al., 2023).

One of *E-commerce*'s key advantages lies in its ability to grant consumers easy access to products across regions and even international borders, using devices like smartphones and computers. This significantly broadens market opportunities for businesses, particularly for MSMEs, allowing them to promote their offerings beyond the limitations of physical retail. Furthermore, operational expenses can be substantially lowered due to decreased reliance on physical space, staff, and conventional advertising methods (Plekhanov et al., 2023).

For consumers, *E-commerce* delivers a seamless and convenient shopping experience, featuring digital catalogs, shopping carts, various payment methods, and flexible delivery options (Gao et al., 2023). Additionally, product ratings and customer reviews foster greater trust and assist buyers in making informed choices, while encouraging businesses to continually enhance their service and product quality (Eliakis et al., 2020).

With the incorporation of technologies like artificial intelligence (AI), big data analytics, and machine learning, *E-commerce* is becoming increasingly sophisticated. According to (Gadzali et al., 2023) and (Hacklin et al., 2018), these solutions enable organizations to automate customer care through chatbots, tailor product suggestions, analyze client behavior, and deploy sophisticated inventory management systems that correspond with real-time sales activity.

E-commerce has numerous advantages, but it also has a lot of drawbacks. Security is still a top priority because of risks including fraud, data breaches, and privacy violations, which call for strong cybersecurity defenses and legal frameworks (Zhao Huang & Benyoucef, 2013). Furthermore, the availability of dependable digital infrastructure is directly related to the success of *E-commerce*, particularly in areas with poor internet connectivity (Harahap et al., 2023).

Government assistance is essential to promoting MSMEs' adoption of *E-commerce*. This entails putting in place laws that support digital transformation, providing technology education courses, and delivering financial and non-financial incentives (Jain et al., 2021). With this assistance, MSMEs can use *E-commerce* platforms to reach a wider audience and improve their competitiveness in the rapidly changing digital market (Long et al., 2023).

Competitiveness

In the fields of business and economics, competitiveness the capacity of an organization, industry, or nation to effectively compete in both home and international markets is a crucial notion. The ability to provide goods or services that are more cost-effective, high-quality, innovative, and offer superior value than rivals is a measure of competitiveness in the business world. According to Long et al (2023), Competitiveness is the primary determinant of a company's capacity to sustain sustainability and increase its market share.

In today's era of globalization and digital transformation, information technology has become a fundamental driver in enhancing business competitiveness (Zhao Huang & Benyoucef, 2013). The digitalization of business operations, integration of data analytics, and overall technological adaptation enable organizations to respond swiftly to market dynamics while boosting both efficiency and effectiveness. Businesses that successfully leverage digital tools are more likely to gain and sustain a substantial competitive edge (Kraugusteliana et al., 2022).

Being competitive is crucial for MSMEs because of their limited resources. MSMEs must

concentrate on the particular benefits they can provide, like distinctive products, individualized services, or rapid innovation. For MSMEs to survive and prosper in a cutthroat market, increasing their competitiveness also requires the use of digital technology and the development of skilled human resources (Zhao Huang & Benyoucef, 2013).

Competitiveness has a connection to both corporate sustainability and economic factors. High-competitive businesses typically focus on social and environmental issues and have a long-term business plan. In light of growing consumer demands and stricter laws pertaining to social and environmental responsibility, the idea of sustainable competitive advantage is becoming more and more significant (Ray, 2012).

The effect of Utilizing Accounting Digitalization in Increasing The Competitiveness of MSMEs.

MSME businesses in the culinary industry can increase financial management efficiency and transparency by putting in place a digital accounting system. This technology makes it possible to record transactions, manage stocks, and monitor cash flow more precisely and in real time. Digitalization not only lowers the possibility of human error but also speeds up company decision-making by supplying more accurate and current data. Prior research has demonstrated that accounting digitization significantly enhances MSMEs' financial transparency and efficiency. Digital accounting systems have been shown to boost firm competitiveness and operational effectiveness (Harahap et al., 2023). Furthermore, research conducted by Julianto et al. (2022) also discusses digitalization as a solution for MSMEs, but this research only focuses on accounting aspects in business and does not relate it to *E-commerce* as an important factor in improving business efficiency.

Meanwhile, research by Chyzhevskaya et al. (2021) focused only on the modernization of accounting systems and the application of digital technology. Hasbolah (2021) discusses the role of digital accounting in the entrepreneurial competence of rural MSMEs, but this study focuses more on rural areas than urban culinary MSMEs, which face different challenges and opportunities in digital competition. However, research Eliakis et al. (2020) indicate that the degree of digital knowledge of firm owners determines how accounting digitalization affects MSME competitiveness. In order for MSMEs to maximize the advantages of this technology for company development, its implementation must be supported by sufficient training and education. The following hypothesis is put forth by this study:

H1: Millennial and Gen Z-managed culinary MSMEs in Malang City are more competitive as a result of the adoption of accounting digitization.

The Impact of Using *E-commerce* to Boost The Competitiveness of MSMEs

Utilizing *E-commerce* platforms allows culinary MSMEs to expand their market reach beyond geographical boundaries, providing access to new customer segments that were previously difficult to target. One of the primary advantages of *E-commerce* lies in its ability to significantly lower operational expenses such as costs for physical storefronts and staffing by enabling businesses to operate more efficiently online. Additionally, these platforms offer user-friendly tools for marketing and promotion, including digital advertising, promotional campaigns, and customer reviews, which enhance business visibility and appeal. In essence, the adoption of *E-commerce* not only broadens market exposure and increases revenue for small-scale culinary

enterprises but also equips them to compete more effectively with larger corporations amid escalating market competition.

This result is consistent with study by Eliakis et al. (2020), which shows that *E-commerce* improves MSME profitability and market access. Additionally, the current study supports the notion that increasing firm competitiveness is largely dependent on digital transformation in marketing. Similar to this, Ausat and Peirisal (2021) stress that although *E-commerce* has the potential to increase MSME competitiveness, its efficacy is mostly dependent on the provision of dependable digital infrastructure and the application of carefully thought-out digital marketing strategies. Similar research by Avriyanti (2020) revealed that although *E-commerce* has the potential to increase competitiveness, its success rate is highly determined by the implementation of appropriate digital marketing strategies and the availability of adequate digital infrastructure. There is also research conducted by Arefiev et al. (2023) that discusses competitive strategies in *E-commerce*, but this research focuses more on a global scale rather than just MSMEs. Meanwhile, Svetlana et al. (2021) study focused more on regulatory and accounting challenges in *E-commerce*, rather than how *E-commerce* can improve the competitiveness of MSMEs.

Therefore, MSME practitioners need to build strong digital marketing skills and work in an ecosystem that facilitates smooth online transactions in order to fully benefit from *E-commerce*. The following theory is put out by this study in light of these findings :

H2: MSMEs in the culinary industry in Malang City run by Millennials and Gen Z are much more competitive when they use *E-commerce*.

METHODS

E-commerce and accounting digitization's impact on MSMEs' competitiveness in the culinary industry was examined using this research methodology. This study uses a quantitative methodology, which is centered on using numerical data to measure the relationship between variables. Questionnaires targeting Malang City's culinary MSMEs' owners were used to gather data, and interviews were conducted to acquire a more thorough understanding of the advantages and difficulties of digitalization. MSMEs that operate in five Malang City subdistricts make up the research population, and Millennials and Gen Zers who have used digitalization and *E-commerce* are among the response criteria.

Purposive sampling procedures are used in this study to choose participants who fit these requirements in order to guarantee that the data collected is representative and pertinent. Based on signs that had undergone validity and reliability testing in earlier research, the questionnaire instrument was created. Multiple linear regression and other inferential statistical techniques were used to analyze the data and examine the impact of *E-commerce* and accounting digitalization factors on MSME competitiveness. To ensure that the research findings were both quantitative and qualitative, in-depth interviews were also utilized to investigate the elements that facilitate and hinder the use of digital technology in the field.

The use of digital technology and systems to oversee accounting procedures in MSMEs in the culinary industry is referred to as accounting digitalization in this study. This variable is evaluated using a number of indicators that characterize the use of technology in financial management, including financial data management, automation in accounting processes, and the usage of accounting software and applications (Hizbul Khootimah Azzaakiyyah, 2023). These metrics suggest that MSMEs are attempting to increase the precision, speed, and transparency of

financial management through accounting digitization. In the end, this promotes more competitiveness and better commercial decision-making. Accounting digitization is effective in increasing the efficiency and transparency of MSME financial management, as demonstrated by (Ausat & Peirisal, 2021).

To create a complete digital ecosystem for MSME operations, accounting digitization also entails the ability to combine financial data with other systems, such as inventory and sales systems (Hizbul Khootimah Azzaakiyyah, 2023). By using this technology, MSME participants can keep an eye on financial situations in real time and lower the possibility of human error, which frequently happens during manual recording. MSMEs can thereby increase financial report accuracy and regulatory compliance. Additionally, accounting digitization makes auditing and assessing company performance easier, which eventually boosts competitiveness and long-term viability (Ausat & Peirisal, 2021).

By eliminating geographical and temporal impediments to transactions, *E-commerce* has completely transformed contemporary business operations. Businesses can increase their market share globally using a variety of digital channels, including websites, mobile applications, and marketplaces, which also give customers easier, faster, and more convenient ways to transact (Costa & Castro, 2021). *E-commerce* can be described as a collection of interconnected factors in the context of study. For instance, questionnaire scores that assess different aspects of the online shopping experience, such as: (1) adoption of *E-commerce* platforms, (2) management of digital marketing, (3) customer interaction, and (4) sales volume, can be used to measure the variable "customer satisfaction" (Sapulette et al., 2023)

Furthermore, *E-commerce* offers MSMEs the chance to improve marketing efficacy and product distribution at a comparatively cheaper cost than traditional approaches (Costa & Castro, 2021). Businesses can access a larger and more varied spectrum of customers without being constrained by time or location by utilizing digital platforms. For Gen Z and Millennials, who frequently shop online, this is particularly crucial. Additionally, MSME companies can gather customer behavior data through *E-commerce*, which helps them create more specialized marketing campaigns and customize their products (Sapulette et al., 2023). Therefore, incorporating *E-commerce* into MSME operations greatly boosts competitiveness in a market that is becoming more digitalized.

Micro, Small, and Medium Enterprises (MSMEs) in Malang play a vital role in the city's economic and cultural landscape. What makes them special is their strong connection to local identity, with many businesses incorporating traditional Javanese elements into their products, such as batik designs, handcrafted goods, and culinary items unique to the region (BPS, 2024a). Malang's MSMEs are also known for their creativity and innovation, often led by young entrepreneurs who experiment with new business models, packaging, and marketing strategies. The city's status as an educational hub provides an additional advantage, as many MSMEs collaborate with local universities for product development, research, and digitalization. These businesses also tend to grow through community-based approaches, empowering women, youth, and local farmers, which helps create a more inclusive economy. Furthermore, the tourism potential of Malang allows MSMEs to tap into a wider market by offering locally made souvenirs and services that appeal to visitors. The growth in the number of Micro, Small, and Medium Enterprises (MSMEs) utilizing digitalization in Malang City has shown a significant upward trend over the past three years. According to data, the number of MSMEs implementing digitalization increased from just 4 units in 2021 to 55 units in 2022, and surged again to 60 units in 2023 (BPS, 2024b). Altogether, the combination of cultural richness, innovation, education, and digital

readiness makes Malang's MSMEs truly distinctive.

From an economic standpoint, the theory of comparative advantage, which was initially put forth by classical economists like David Ricardo and Adam Smith, is strongly tied to the idea of competitiveness (Costa & Castro, 2021). The ability of companies to differentiate their products through distinctiveness, superior quality, and added value is referred to as competitiveness in the context of culinary MSMEs. Strongly competitive culinary MSMEs typically demonstrate strengths in customer satisfaction and loyalty, operational efficiency (speed and accuracy of service), competitive pricing, and product excellence.

The ability of MSMEs to adjust to shifting consumer preferences and market conditions is another aspect of competitiveness, particularly in the current digital era. MSMEs have a better chance of preserving and growing their market share if they can leverage digital technologies and contemporary marketing techniques. Additionally, a key component of adding value that sets companies apart from rivals is the innovation of products and services. According to (Raharjo et al., 2023), competitiveness in the context of culinary MSMEs is not solely evaluated from an economic perspective; it also encompasses elements of business sustainability, such as efficient resource management and customer responsiveness. Therefore, in a market that is becoming more and more competitive, competitiveness is a crucial metric for evaluating the growth and performance of MSMEs.

RESULTS

Descriptive Statistics Test

An overview of the data used in this study, which covers the variables of MSME competitiveness, *E-commerce*, and accounting digitization, is provided below. Important details regarding the values and overall patterns of the study participants are provided by these descriptive statistics.

Table 1. Descriptive Statistics

Characteristic Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Accounting Digitalization (X1)	107	7.00	25.00	20.2150	3.23608
<i>E-commerce</i> (X2)	107	9.00	25.00	20.0748	3.07976
Competitiveness (Y)	107	6.00	25.00	20.0280	3.22273
Valid N (listwise)	107				

Source: data processed (2025)

According to the data in the table, respondents' values for the Accounting Digitalization variable (X1) ranged from 7.00, which was the lowest value, to 25.00, which was the highest, with an average of 20.2150 with a standard deviation 3.23608. This means that the distribution of data is homogeneous. The *E-commerce* variable (X2) also has a mean 20.0748 with a standard deviation 3.07976. This means that the distribution of data is homogeneous. Conversely, the Competitiveness variable (Y) had an average of 20.0280 and standard deviation 3.22273, with the lowest value being 6.00 and the highest being 25.00. This means that the distribution of data is homogeneous.

Regression Model

Multiple Linear Analysis is used in this study to evaluate the hypothesis between the independent and dependent variables. The impact of independent variables, specifically *E-commerce* and Accounting Digitalization, on the dependent variable, MSME Competitiveness, is examined using the regression model. To concurrently determine the direction and degree of the association between these variables, multiple linear analysis was selected. The test findings are as follows:

Table 2. Hypothesis Testing

Variables	B	Test t	Sig t	Decision
(Constant)	3.183			
Accounting Digitalization (X1)	0.300	3.341	0.001	H1 accepted
E-commerce (X2)	0,537	5.677	0.000	H2 accepted
Adjusted Squared R	0,572			

Source: data processed (2025)

Multiple liner analysis is used in this study using the following equation:

$$Y = 3.183 + 0.300 X1 + 0.537 X2 + e$$

DISCUSSION

The impact of digitalizing accounting on raising the competitiveness of MSMEs run by Gen Z and Millennials in Malang City's food industry.

The partial test (t) results indicate that the competitiveness of MSMEs in Malang City's culinary industry run by Millennials and Gen Z is significantly impacted by accounting digitization. This is demonstrated by a significance value of 0.001, which is less than 0.05, and a t-count value of 3.341, which is larger than the t-table of 1.983. The alternative hypothesis H1 that "accounting digitalization has a significant effect on competitiveness" can thus be accepted.

According to Diawati et al. (2023), digital transformation in accounting involves the use of technology to upgrade financial recording, reporting, and analytical systems, providing MSMEs with quick and accurate access to financial data. In this case, the Resource-Based View (RBV) theory provides a relevant theoretical basis because this theory emphasizes the importance of internal resources that can create sustainable competitive advantage (Morgan P. Miles, 2006). Accounting digitization enables MSMEs to leverage technology as a strategic resource, improve operational efficiency, reduce manual errors, and improve financial accountability. Thus, RBV highlights that the successful use of this technology is highly dependent on how MSMEs manage and utilize their internal resources (Gao et al., 2023). According to the study's findings, the use of accounting digitization has been shown to enhance financial accountability and operational performance, both of which can raise MSMEs' competitiveness (Gadzali et al., 2023). Additional research Gao et al. (2023) supports this finding as well, demonstrating a favorable and significant

relationship between modern management accounting and accounting digitization.

However, although the results of this study support the findings Diawati et al. (2023) that shows a positive and significant relationship between accounting digitization and the financial performance of MSMEs. This study is important to note that technology adoption can also face challenges, such as limited digital literacy among MSME owners, which can affect the effectiveness of its implementation. Therefore, while accounting digitization offers significant benefits in enhancing competitiveness, training and development of technological competencies for SME managers are essential to maximize these potential benefits.

The impact of using *E-commerce* to boost the competitiveness of MSMEs run by Gen Z and Millennials in Malang City's food industry.

Based on the partial test (t) results, it can be said that the use of *E-commerce* significantly boosts the competitiveness of MSMEs in Malang City's culinary industry, which is run by Millennials and Gen Z. This is demonstrated by a significance value of 0.000, which is below the alpha level of 0.05, and a t-count value of 5.677, which is greater than the t-table of 1.983. As a result, it is possible to validate the alternative hypothesis H2 accepted, which claims that accounting digitization significantly affects MSMEs' competitiveness. *E-commerce* refers to the exchange of products and services via electronic media, particularly the internet. *E-commerce*'s significant contribution to the global economy has been reinforced by digital disruption due to its superior features, which include cost reduction, transaction speed, and unrestricted accessibility for customers worldwide (Gao et al., 2023). In this context, the Technology Acceptance Model (TAM) can explain how perceptions of ease of use and usefulness of technology play an important role in the adoption of *E-commerce* (Kraugusteeliana et al., 2022). This model states that the higher the perceived usefulness and ease of use of a technology, the more likely users are to adopt it.

Modern business practices have been altered by the *E-commerce* revolution, particularly for MSMEs. By lowering reliance on physical storefronts and enabling customers to interact whenever they choose, this digital trading system not only broadens the market reach but also boosts operational efficiency (Andonov et al., 2021). This result is consistent with earlier studies Ausat and Peirisal (2021) that demonstrate how information technology use, particularly *E-commerce*, significantly affects MSME actors' capacity to become more competitive.

However, despite the many advantages of *E-commerce*, there are also challenges related to data security and adequate digital infrastructure. Some MSMEs, especially in areas with limited digital infrastructure, may face difficulties in realizing the full potential of *E-commerce*. In addition, it is important to consider that the adoption of *E-commerce* is not only about using digital platforms, but also about designing appropriate and sustainable marketing strategies that can effectively attract customers. Research Avriyanti (2020) also highlights that *E-commerce* will not have an optimal impact without the right digital strategy and adaptation to market dynamics.

Overall, these findings indicate that the application of digital technology, whether through accounting digitization or *E-commerce*, has a significant impact on the competitiveness of MSMEs managed by Millennials and Gen Z. Accounting digitization contributes to improved financial management efficiency and accountability, while *E-commerce* enables SMEs to expand their markets and enhance operational efficiency. When both technologies are implemented together, they can complement each other to enhance SMEs' competitiveness, both operationally and in terms of marketing.

CONCLUSION

Based on the results of the research and discussion conducted, it can be concluded that the digitalization of accounting and *E-commerce* has a significant partial influence on the competitiveness of MSMEs. Therefore, the hypothesis stating that the utilization of accounting digitalization and *E-commerce* can enhance the competitiveness of SMEs in the culinary sector managed by Millennials and Gen Z in Malang City can be accepted. However, this study has several limitations, including the limited sample size of only 107 respondents from five districts in Malang City. With the existing respondents, it may not fully represent all MSMEs in the culinary sector in the area. Additionally, this study only assesses the impact of accounting digitalization and *E-commerce* separately, without considering other external factors such as government policy support or the evolving market conditions. For future research, several recommendations can be considered. First, the research variables should be expanded by exploring other factors related to accounting digitalization, *E-commerce*, and competitiveness, such as digital literacy among SME owners, technical training support, digital marketing strategies, and customer service quality, which can influence SME performance. This will provide a deeper understanding of the dynamics of SME development. Second, it is recommended that future research use a larger sample and include SMEs from various regions, both those that have adopted accounting digitalization and *E-commerce* and those that have not, to provide a broader picture of the challenges and opportunities faced by SMEs. Third, based on the research findings, it is hoped that SMEs can use these results as a guide in implementing accounting digitalization and *E-commerce* to enhance their competitiveness in the rapidly evolving digital era, thereby making the adoption of these technologies a strategic step in optimizing business operations and expanding markets.

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