



## Analysis of Business Strategies in Increasing Competitive Advantage for SMEs in the Digital Era

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### Keywords

digital transformation,  
MSMEs, business  
strategy, innovation,  
competitive advantage

### Abstract

In the era of rapid digital transformation, Micro, Small, and Medium Enterprises (MSMEs) are required to adapt to new business models to remain competitive and sustainable. The increasing use of digital technology has transformed how businesses operate, interact with customers, and deliver value. This study aims to analyze the effect of business strategies on enhancing the competitive advantage of MSMEs in the digital era. A quantitative research approach was employed by distributing questionnaires to MSME owners and managers who have adopted digital strategies in their business operations. The data collected were analyzed using simple linear regression to examine the relationship between business strategies—namely innovation, differentiation, and market orientation—and competitive advantage. The results indicate that business strategies have a significant positive influence on MSMEs' competitive advantage, particularly through product innovation and the utilization of digital technology. These findings highlight that adaptation to digital transformation is not merely an option but a strategic necessity for survival and growth. The study recommends that MSMEs develop adaptive and innovative strategic planning to strengthen their competitiveness in an increasingly dynamic and technology-driven market environment.



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## INTRODUCTION

In the midst of the era of globalization and the *industrial revolution 4.0*, digital transformation has become a global issue that affects not only large corporations but also *Micro, Small, and Medium Enterprises (MSMEs)*. World economic organizations such as the OECD and

the World Economic Forum emphasize that *MSME* players around the world must adjust their business strategies to survive and compete in the ever-evolving digital ecosystem (OECD, 2021). The use of digital technology, such as *e-commerce*, *big data*, and *social media*, serves as a catalyst for changes in the business model of *MSMEs* globally. *MSMEs* are required to adapt not only in the context of marketing but also in supply chain management, customer service, and product innovation (Linda et al., 2022; Prayitno, 2024; Sudjatmoko et al., 2025). However, major challenges still loom, especially for *MSMEs* in developing countries such as Indonesia, who face limited access to technology, low digital literacy, and a lack of structured business strategy (Buteau, 2021; Cahya et al., 2025; Rujitoningtyas et al., 2024; Salam et al., 2018; Sinha et al., 2024).

The main problem faced by *MSMEs* in increasing their competitive advantage in the *digital era* is that the formulation and implementation of business strategies are not optimal (Hendrawan et al., 2024; Huda et al., 2025). Many *MSME* actors run their businesses based on intuition or old habits, without a clear and measurable strategic foundation (Yulianto & Wibowo, 2022). Internal factors such as a lack of understanding of market segmentation, weaknesses in product innovation, and financial management that has not been digitally integrated are major obstacles. On the external side, pressure from competitors who have adopted digital technologies earlier, changes in consumer behavior favoring online transactions, and increasing expectations for speed and quality of services have all added to the complexity of the challenges faced by *MSMEs* (Setiawan et al., 2021). In addition, limited access to management and technology training has worsened the situation.

The absence of an adaptive business strategy causes many *MSMEs* to fail to maintain market share or even go out of business in increasingly fierce competition. A study conducted by Google and Temasek (2020) shows that more than 40% of *MSMEs* in Southeast Asia without a digitalization strategy experienced a drastic decrease in income during the COVID-19 pandemic (Gálvez Nogales & Casari, 2023; Truong, 2024). *MSMEs* that are unable to adjust their business strategies will find it difficult to meet rapidly changing market demands, optimize digital distribution channels, and maintain customer loyalty. As a result, competitive advantage—which is the ability to create value that competitors cannot easily replicate—becomes difficult to achieve. This impact is not only felt by business actors, but also by the national economy as a whole, considering that *MSMEs* account for more than 60% of Indonesia's GDP and absorb 97% of the workforce (Ministry of Cooperatives and SMEs, 2023).

In this study, there are two main variables analyzed, namely *business strategy* (variable X) and *competitive advantage* (variable Y). A business strategy is defined as a series of decisions and actions designed to achieve a competitive advantage through long-term planning. Some of the key elements in a business strategy include: product innovation, service differentiation, market penetration, and cost efficiency (Porter, 1985). On the other hand, competitive advantage is defined as the ability of a company to outperform its competitors in a sustainable manner through the unique added value provided to customers (Barney, 1991). Indicators of competitive advantage in

the context of *MSMEs* include increased customer loyalty, revenue growth, market expansion, and resilience to economic fluctuations. By analyzing the relationship between business strategy and competitive advantage, this study is expected to provide new insights into how *MSMEs* can optimize their potential amidst the digital transformation occurring today.

The novelty of this research lies in the integration between the conventional business strategy framework and the dynamics of the digitalization of *MSMEs* in Indonesia (García-Vidal et al., 2025). Most previous research focused only on the digitalization aspect of *MSMEs* in terms of technology adoption or digital consumer behavior. This research is different because it centers on how the formulation of appropriate and contextual business strategies can drive competitive advantage in the *digital era*, not just the use of technology (Agustian et al., 2023; Park & Mithas, 2020; Shehata & Montash, 2020). In addition, this study utilizes a primary data-based approach from *MSME* actors who have or are actively carrying out digital transformation (García-Vidal et al., 2025; Rupeika-Apoga & Petrovska, 2022; Syah & Noviaristanti, 2022). Thus, the findings of this study should be more relevant and applicable for policymakers and business actors.

The urgency of this research is very high, considering the position of *MSMEs* as the backbone of the national economy, which is currently under pressure to adapt digitally. According to data from the Ministry of Cooperatives and SMEs, only around 27% of the 65 million *MSMEs* have actively entered the digital ecosystem (Ministry of Cooperatives and SMEs, 2023). This shows a gap in strategy and adaptation readiness. If this gap is not immediately addressed, Indonesian *MSMEs* will be left behind in global competition and will struggle to optimally contribute to the achievement of the vision of a *Golden Indonesia 2045*. This research can serve as a concrete contribution by providing a strategic map that can be used as a reference in formulating targeted and data-based digital development policies for *MSMEs*.

The main purpose of this study is to analyze the influence of business strategy on increasing competitive advantage in *MSMEs* in the *digital era*. Specifically, this study aims to identify the most significant elements of business strategy in driving competitive advantage, as well as measure the extent to which factors such as innovation, differentiation, and market orientation play a role in the context of *MSME* digital transformation. Furthermore, this research also aims to provide practical recommendations for *MSME* actors to design business strategies that are not only adaptive but also proactive in responding to digital market dynamics.

This research is expected to provide both theoretical and practical benefits. Theoretically, the results of this study can enrich the literature on strategic management and the competitiveness of *MSMEs*, especially in the context of digitalization in developing countries. This research can also serve as a reference in the development of *MSME* business models that are relevant to local conditions. Practically, this study offers guidance for *MSME* actors to develop more targeted and data-based business strategies. Additionally, the findings are useful for policymakers and *MSME* companion institutions in designing strategy-based training and mentoring programs that directly impact business performance.

## MATERIALS AND METHOD

This research was quantitative with a descriptive approach and aimed to systematically describe the relationship between business strategy and the competitive advantage of MSMEs in facing the challenges of the digital era. This approach provided an objective picture based on numerical data from respondents, explaining the extent to which business strategy influenced competitive advantage in small and medium-sized businesses.

MSMEs operating in selected city or regency areas—such as Surakarta, Yogyakarta, Bandung, or similar regions—were chosen for their representative characteristics in business activities and adoption of digital technology. The location was selected because of the high concentration of MSME actors and support from local governments for MSME sector digitization. The study was conducted from January to March 2025, which allowed sufficient time to collect data fitting the predetermined population criteria.

This research focused on key aspects that affected business strategy and competitive advantage, including innovation, market orientation, operational efficiency, digital technology use, and product competitiveness. The analysis centered on how MSME actors formulated strategies in response to changing consumer behavior, technological progress, and increasing competition. Competitive advantage was measured by indicators such as customer loyalty, turnover growth, product differentiation, and adaptability to market dynamics.

The population included MSME actors in the study area who had run their business for at least two years and used at least one digital strategy in marketing, distribution, or customer service. Purposive sampling was applied, selecting respondents based on criteria relevant to the research purpose. One hundred MSME respondents were surveyed, from various sectors such as culinary, fashion, handicrafts, and creative services, chosen for their active involvement in digital business strategies and their willingness to participate.

The main instrument was a questionnaire based on established indicators of business strategy and competitive advantage. It used a five-point Likert scale to gauge respondents' agreement with research statements. The instrument's validity and reliability were tested using pilot trials and statistical analysis (Cronbach's Alpha), and it was distributed both directly and online, reflecting the widespread digital platform use among MSMEs.

To gain deeper contextual insights, data collection was supported by semi-structured interviews with selected MSME actors. Data triangulation was used to enhance validity by comparing results from questionnaires, interviews, and relevant business documents.

Reliability was confirmed if Cronbach's Alpha exceeded 0.7, while validity was ensured through reference to expert-developed indicators and tested research instruments. The diversity of business sectors and respondent backgrounds supported external validity. As a result, the findings should be generalizable to the MSME population both within the study area and more broadly.

## RESULTS AND DISCUSSION

This research was conducted on Micro, Small, and Medium Enterprises (MSMEs) spread across the Bandung City area, West Java, an area known as one of the centers of creative and digital economic growth in Indonesia. This city was chosen as the research location because it has a high concentration of active MSME actors and is supported by digital infrastructure and local government policies that encourage the digitalization of the small business sector. Based on data from the Bandung City Cooperatives and SMEs Office, there are more than 17,000 MSME actors who are active and run businesses in various sectors, including culinary, fashion, handicrafts, and digital services. This study involved 100 MSME respondents who met the criteria, namely having been running a business for at least two years and having integrated digital elements in their business strategy, both through online marketing, digital customer service, and technology-based management systems.

Of the 100 respondents involved, the majority or 62% were female business actors, while the remaining 38% were men. Judging from the age group, as many as 75% of respondents are in the productive age range, which is 26 to 45 years old. In terms of the business sector, the majority of respondents are engaged in the culinary sector as much as 54%, followed by fashion at 22%, handicrafts at 14%, and the rest in the field of digital services. The level of education of business actors also varies, with the composition of 48% of high school/vocational school graduates, 39% of undergraduate (S1) graduates, and the rest from other levels of education such as diplomas and postgraduates. This picture shows that the MSME actors involved in the study come from quite diverse backgrounds but have general characteristics as digital business actors.

This study examines two main variables, namely business strategy as an independent variable (X) and competitive advantage as a dependent variable (Y). Business strategy variables are analyzed through three main indicators, namely product innovation, differentiation, and market orientation. Based on the results of processed data from the questionnaire, it is known that as many as 78% of respondents are actively innovating the products or services they offer, both in the form of taste modifications, packaging, visual appearance, and the use of environmentally friendly materials. MSME actors in the culinary sector have made the most innovations in product and packaging variations. Meanwhile, on the differentiation indicator, 65% of respondents stated that they have certain uniqueness compared to their competitors, such as exclusive product design, personalized service, or distinctive brand story. Meanwhile, market orientation indicators show that 71% of MSME players routinely monitor market trends through social media, conduct customer needs analysis, and adjust their products to consumer preferences. These three indicators show that the business strategies carried out by MSME actors are sufficiently directed and adaptive to changes in the digital market.

In the competitive advantage variable, there are four indicators used, namely customer satisfaction, customer loyalty, business growth, and resilience to crises. Based on the data, as many as 82% of respondents stated that their customers felt satisfied with the products and services provided. This is shown by the many positive reviews and high customer retention rates.

Furthermore, 63% of MSME actors have regular customers who make repeat purchases in the last six months. In terms of business growth, as many as 58% of respondents experienced an increase in turnover of more than 20% after implementing a digital strategy. In addition, as many as 69% of respondents admitted that they were able to survive and even grow during the COVID-19 pandemic crisis, thanks to the flexibility of their business strategies, including utilizing digital platforms to expand market reach.

All data collected through the questionnaire has gone through a validation and reliability process. Of the 100 questionnaires distributed, all of them were returned in a complete state and suitable for processing, so that the response rate reached 100%. The instrument was tested for validity using Pearson correlation, and all items showed a value of  $r\text{-count} > r\text{ table}$ , indicating that each statement in the questionnaire was valid. The reliability test was conducted using Cronbach's Alpha, and a  $\alpha > 0.7$  value was obtained, indicating that the instrument was quite reliable. The data is processed using SPSS software version 25. The results of the simple linear regression test showed that business strategy had a significant effect on the competitive advantage of MSMEs, with a regression coefficient value ( $\beta$ ) of 0.638 and a significance of 0.000 ( $p < 0.05$ ). An R-Square value of 0.407 indicates that the business strategy is able to explain the variance of competitive advantage by 40.7%, while the rest is influenced by other variables outside the model.

Several interesting findings were successfully revealed in this study. First, product innovation strategies and service differentiation have proven to be the two most dominant approaches in influencing the competitive advantage of MSMEs. MSMEs that actively update their products and provide unique value compared to competitors tend to be better able to attract new customers and maintain the loyalty of old consumers. Second, the use of digital media such as marketplaces, social media, and official websites has a real impact on reaching a wider market and managing customer relationships. MSMEs that consistently use digital platforms experience more stable growth than those that still rely on conventional marketing. Third, MSME actors who have a written business plan, even if it is simple, tend to have a clearer business development direction and more measurable target achievement. This shows that formality in business planning makes a positive contribution to competitive advantage.

In addition, it was found that MSME actors who actively participate in training, workshops, or join the digital entrepreneur community have higher competitiveness than those who run their businesses independently. Interactions within the community provide access to new ideas, market information updates, and collaboration opportunities. Local government support is also one of the strengthening factors, although it has not been utilized optimally by all respondents. Only 36% of respondents had participated in the MSME digitalization incubation program or training organized by the relevant agencies. This shows that there is still a gap between government programs and MSME actors that need to be bridged.

Based on these results, it can be answered that business strategy has a positive and significant influence on increasing the competitive advantage of MSMEs in the digital era. The hypothesis proposed in this study proved to be accepted. Strategies that are prepared by taking into account

market conditions, supported by continuous innovation, and optimal use of digital technology can be the main capital for MSMEs in winning increasingly competitive competition. These findings reinforce the previous literature that states that competitive advantage is determined not only by capital factors or business scale, but also by the accuracy of strategy and adaptability to market dynamics (Porter, 1985; Barney, 1991).

Overall, this study successfully shows that business strategy plays a central role in determining the success of MSMEs in the midst of the ongoing digital transformation. Efforts to increase product innovation, create service differentiation, and understand the market are important keys in achieving competitive advantage. Thus, this research makes a strong empirical contribution to the development of MSME management strategies in the digital economy era.

### **Answering the Urgency of Research: Business Strategy as a Pillar of MSME Resilience in the Digital Era**

This research is motivated by the fact that MSMEs as a vital sector of the national economy face great challenges in entering the digital era. Digitalization is no longer an additional option, but rather a major factor determining business sustainability. In this context, this research answers the urgency of how business strategies can be used as a foundation for MSMEs to survive, grow, and compete in the midst of rapid digital transformation. The main findings show that business strategy makes a significant contribution to the competitive advantage of MSMEs, with a very strong significance value ( $p = 0.000$ ) and an influence of 40.7% on competitive advantage. This proves that strategy is not just a written document, but a decision-making system that determines the direction and competitiveness of the business.

In this fast-paced and uncertain era, careful business planning plays an important role in shaping a sustainable competitive advantage. The competitive advantage of MSMEs is not only determined by low prices or strategic locations, but rather how the business designs and implements strategies based on innovation, differentiation, and market orientation. These findings are in line with the concept put forward by Porter (1985) that an effective business strategy is oriented towards the creation of unique value, which is not easily replicated by competitors. So, the more strategic and structured the business approach taken by MSMEs, the greater their opportunity to create a strong positioning in the digital market.

### **Causes of Strategy Gaps in MSMEs: Between Ignorance and Unpreparedness**

The business strategy gap experienced by MSMEs in Indonesia is caused by a number of internal and external factors. Internally, many MSME actors are still running businesses in a traditional way, oriented towards daily sustainability rather than long-term vision. Based on data from the research, as many as 35% of MSMEs do not have a documented business strategy. This shows that there are still many business actors who rely on instincts and habits in running a business, without a clear market analysis or growth direction. Ignorance in formulating business

strategies is often exacerbated by limited access to entrepreneurship education, management training, or ongoing business mentoring.

On the external side, pressure from large competitors and changes in consumer behavior are an additional challenge. Today's consumers demand speed of service, clarity of product information, and personalized added value. MSMEs that are unable to follow this dynamic will be easily displaced. Therefore, the integration of business strategy with the use of technology is a solution that cannot be delayed. This research shows that MSME actors who combine innovative strategies with digital technology have advantages in maintaining customer satisfaction and loyalty, and can show better resilience amid a crisis.

### **The Impact of the Implementation of the Right Business Strategy**

The implementation of the right business strategy has been proven to have a real impact on the achievement of MSME competitive advantage. Based on the results of the study, indicators of competitive advantage such as customer loyalty, business growth, and resilience to crises have increased significantly in MSME actors who develop innovation-based strategies and differentiation. Innovation strategies allow MSME players to adapt products and services to rapidly changing market dynamics. Innovation does not always have to be in the form of high technology, but it can be in the form of packaging modifications, the addition of product features, or the development of more efficient services.

Meanwhile, differentiation is an effective approach to building a strong brand identity. MSMEs that offer uniqueness in their products, both in terms of design, story, and local values raised, have a greater chance of attracting loyal customers. In this context, the results of the study reinforce the theory of competitive advantage put forward by Barney (1991), that companies that have resources and capabilities that cannot be easily copied by competitors, will gain a long-term advantage. For MSMEs, differentiation is a way to highlight uniqueness and reduce price-based competition.

Market orientation is also an important aspect that is found to be dominant in forming a competitive advantage. MSMEs that actively read trends, listen to consumers through social media, and adjust products responsively, are able to increase customer satisfaction and retention. This is where digital technology plays a big role. The use of simple analytical tools such as Google Analytics or marketplace transaction reports helps MSME actors in making data-driven strategic decisions. The positive impact of this approach is measurable business growth and a clearer direction of business development.

### **Strategic Solution: Integration of Digitalization with Managerial Literacy**

Based on the findings of the research, the main solution to increase the competitive advantage of MSMEs is to integrate digitalization with increasing managerial literacy. Digitalization alone is not enough if it is not accompanied by a good understanding of business management. Many MSME actors already have social media accounts and marketplaces, but do

not have a content strategy, do not conduct sales performance analysis, or do not build customer relationships systematically. Therefore, mentoring and training programs that target strengthening business strategies must be a priority in MSME development policies.

Local governments, financial institutions, and academics can collaborate in developing a strategic management training curriculum that is contextual, practical, and easily accessible to MSMEs. In addition, digital platforms that provide business planning templates, strategy simulations, and business performance appraisal systems based on simple indicators will greatly help MSME actors in building a strategic culture. With this approach, MSMEs will not only survive the competition, but will also develop into resilient and independent business actors.

### **Strengthening the Contextual and Practical Dimensions**

This research contributes to the literature on strategic management with a contextual and reality-based approach of MSMEs in the field. Most previous research has focused more on digitalization or technology aspects, regardless of how business strategies are designed and implemented as a whole. For example, a study by Yulianto & Wibowo (2022) only photographed the phenomenon of the use of digital marketing by MSMEs without examining the business strategy structure behind it. This research provides a more complete picture that digital marketing is only one part of the overall business strategy.

In addition, the novelty in this study lies in the integrative analysis between the three main indicators of business strategy—innovation, differentiation, and market orientation—and how each of these indicators contributes specifically to competitive advantage. Thus, this study fills a gap in previous research that tends to look at business strategies in a macro manner without describing its applicative dimensions for MSME actors. The finding that business strategy is able to explain 40.7% of the variance of competitive advantage is an empirical contribution that reinforces the relevance of classical strategy models in the context of small-scale businesses in the digital age.

### **Policy Direction and Business Planning of MSMEs**

The implications of the findings of this study are very relevant in the formulation of MSME development policies, both at the local and national levels. The government needs to review the effectiveness of the MSME digitalization program, which has been too focused on providing hardware or technology training, but has not touched on the planning and execution aspects of business strategies. Business incubation programs need to be expanded in scope to include training in marketing strategies, product management, market analysis, and digital business plan creation.

For MSME actors, the results of this research are an important alarm that success in the digital era is not just about being on online platforms, but rather about how they build relevant, dynamic, and value-added strategies. Business planning, performance evaluation, and innovation development need to be an organizational culture even on a small scale. Business strategy should

be understood not as something complicated or just for large corporations, but as a navigation tool that determines the direction of business in the midst of global digitalization.

## CONCLUSION

This study found that business strategies incorporating product innovation, differentiation, and market orientation significantly enhance the competitive advantage of MSMEs in the digital era. MSMEs that adopt structured, innovative, and market-responsive strategies are better equipped to thrive in technology-driven environments, as innovation and differentiation create unique value propositions difficult for competitors to replicate, and market orientation aligns offerings with changing consumer preferences. The findings suggest that competitive advantage depends more on strategic adaptability than on capital or scale. Practically, continuous training and capacity building are vital for MSMEs to develop and implement effective digital-based strategies. The study recommends that MSMEs integrate business strategy with technology adoption and innovation, supported by collaboration among government, academia, and industry to foster a sustainable digital transformation ecosystem. Future research could explore the specific roles of different digital technologies in enhancing various aspects of MSME competitiveness and investigate the impact of such strategies across diverse cultural and regional contexts.

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