

**THE ROLE OF DIGITAL ORIENTATION, DIGITAL CAPABILITY
AND DIGITAL INNOVATION ON THE RELATIONSHIP OF
ENVIRONMENTAL DYNAMISM TOWARDS FMCG SME'S
PERFORMANCE****Anggit Primadita Karina¹, Rifelly Dewi Astuti²**¹University of Indonesia, Faculty of Economics and Business, anggit.primadita@ui.ac.id²University of Indonesia, Faculty of Economics and Business, rifelly.dewi@ui.ac.id

ABSTRACT

Innovation activities have become the basis for a new digital infrastructure among businesses. Business actors in this study referring to SMEs need to develop digital orientation and digital capabilities in building digital innovation, where increasing these three factors can lead to a competitive advantage to improve company performance for SMEs, especially in the FMCG industry. The main objective of this research is to examine the role of dynamics of business environment on competitive advantage and performance through digital orientation, digital capability, and digital innovation. This study uses a quantitative approach collected from 216 FMCG SMEs in Indonesia. We intend to find the relationship between each variable and the conclusion of these studies using SEM analysis. The results of the SEM analysis show that there is a significant positive relationship between dynamic environment to digital orientation and digital capability. In addition, digital orientation and digital capability have a significant direct positive relationship to digital innovation. Moreover, digital innovation has a significant positive impact to performance directly, and also mediated by competitive advantage. However, digital orientation and digital capability do not have a direct significant effect on competitive advantage.

Keywords: *Dynamic environment, Digital orientation, Digital capability, Digital innovation, Firm performance*

1. Introduction

The global Covid-19 pandemic that occurred in 2020 has significantly impacted all sectors of the economy and business. In volatile economic conditions, SMEs will always face various challenges in the external environment that have the potential to face uncertainty created by the surrounding environment. Even under normal conditions, Sharma (2020) also explained that SMEs also need to face a competitive dynamic environment due to the small business scale and limited resources so that they need to adapt to survive. One of the SME industry sectors is Fast Moving Consumer Goods (FMCG). FMCG are products that are needed by all end users to fulfill their daily needs (Pongiannan & Chinnasamy, 2014). Grouping or categorizing FMCG products, for example, personal care, household needs, soft drinks, bathroom cleaners (toiletries), detergents, batteries, stationery, cosmetics, pharmaceuticals, food packages, and others. The rapid development of retail in Indonesia is based on the company's desire to meet the needs of each of its customers. In buying goods or services, a person will make decisions based on wants and needs. Decisions will be stronger if these needs are routine in meeting family needs. The rapid development of retail is also supported by the very high population of Indonesia, and 72% are of productive age. This situation makes Indonesia the most potential market in the Southeast Asia Region.

The emergence of consumer behavior changes that affect shopping activities to meet needs during the pandemic is also a reference so that SMEs can innovate in producing goods and services per market needs. In the innovation view, organizations that respond to uncertainty, change, and environmental turbulence can remain agile to innovate products, processes, or structures. Environmental changes make organizations pay attention to environmental conditions and encourage workers to be involved and adapt to changes (Uzkurt, Kumar, Kimzan,

& Sert, 2012), so the capability to adapt to change is also important for SMEs. In adapting to the digital environment, the use of technology will also become an integral part of an organization.

Technology-based orientation is considered the company's commitment to the application of technology and responsiveness to technological changes. In line with the statement given by Khin & Ho (2018) that digital technology is important to follow, and companies must be digitally oriented to be able to embrace technology in their daily lives so that they are transformed into digital solutions that innovate to answer the problems being faced by SMEs. In addition to the importance of orientation towards the adoption of digital technology, an organization also needs to have the capability to be able to manage and utilize the technology as well as possible. This is done when the organization has the desire to innovate; hence digital capabilities will accelerate the process and then integrate human strength with technology. This is said to be a challenge to face an environment that has been transformed into the digitalization era.

Basically, SMEs that want to succeed in an all-technology environment need an understanding of strategic orientation to understand the capabilities that must be possessed to compete in the digital environment as well as orientations that can support their development (Quinton et al., 2017). Baker & Sinkula (1999) also argue that organizations that combine both orientations are better equipped to engage in the kind of generative learning that leads to a product, procedure, and system innovation. When the customer needs change and forces organizations to learn and have new knowledge, they will be able to produce a certain product or service so that it meets customer preferences. Digital technology manages integrated product life cycles and improves efficient, reliable, and sustainable business operations.

Companies need to change their business processes and improve customer satisfaction by using digital technologies connecting people, systems, and products or making their services more effective and efficient. Digital technology creates new ways for companies to integrate customer requirements into product development or service delivery across the entire process chain. Although new products highlight a company's innovation and prestige, some experts suggest that process and administrative innovation gives companies a greater competitive advantage than product innovation. The reason is that administrative processes and innovations are hidden within the company; as a result, it will be more difficult for competitors to reverse engineer and imitate these innovations.

2. Literature Review

2.1 Theoretical Framework

Uzkurt et al. (2012) assessed the organization's external environment, such as the nature and demands of the market faced by the organization. Market turbulence or market demand will have an influence on market stability and uncertainty in meeting customer needs, so market fluctuations like this need to show a combination to meet customer preferences (Uzkurt et al., 2012). Market turbulence can also be characterized by changes in styles, models, and short product life, so companies must be able to respond to this rapidly changing market (Phromket and Ussahawannitchakit, 2009). An organization that has a strategic orientation reflects its belief in being able to run the business and guide activities, for example, an organization that has a market orientation can focus on creating and delivering value for customers by pursuing activities that can meet current and future customer needs and can respond to customer needs extensively (Grimmer et al., 2017).

Given the two key elements presented by Nambisan et al. (2019) that digitalization encourages the close integration of strategic elements. First, value creation processes and technology structures are becoming more accessible to external parties, resulting in more flexible product and service boundaries. To reap the potential benefits of openness and generative processes, close alignment is required between the company's internal functions, organizational environment, and technology (Dantsoho et al., 2020). Thus, conceptualizing a digital orientation demands the integration of internal and external strategic elements. Second, as the use of digital technology continues to increase, the close relationship between technology suites and organizational processes and routines is important (Khin & Ho, 2019).

In the case of digital innovation, digital capabilities are needed to integrate digital technology with potential and professional talents. Drawing on dynamic capability theory, digital capabilities can be considered as dynamic capabilities, which are explained as organizational capabilities to create new products and processes to respond to changing market conditions (Khin & Ho, 2019). In addition, digital capabilities complement the digital orientation of a company because only companies that have the skills to manage new technology will be ready to adopt the technology and can commit to transforming technology into new products. Likewise, digitally capable companies also need to be committed and prepared to embrace new technologies to develop products that provide a competitive advantage (Khin & Ho, 2019).

Digital technology is changing the logic of value creation. Technology can increase capabilities to create value through accessibility and efficiency, can expand the process of exchanging goods and services by utilizing greater data intensity (Khin & Ho, 2019). This makes digital capabilities a strong driver of innovation from

business models that rely on technology (Berawi et al., 2020). Innovation is closely related to the capabilities of companies that want to be involved in innovation, such as the introduction of new processes, products, or ideas in the organization (Hult et al., 2004). Through innovation, industry leaders can design solutions to problems encountered in the business challenges in the environment to provide the foundation for the survival and success of the organization in the future.

Competitive advantage is one of the fundamental sources for business actors to achieve higher performance than competitors. Competitive advantage is anything that an organization can do much better than its competitors by having something competitors do not have and the ability to produce better products (Barney, 1991). These advantages can be achieved by utilizing resources that make the products more efficient and effective.

An organization can create selling points and benefits that are better than its competitors, reflecting a competitive advantage (Torres, Ferraz, & Santos-Rodrigues, 2018). Competitive advantage can be measured by several indicators, including the ability to minimize production costs, market exploration capabilities, and the ability to win the better competition than competitors, which are further developed as indicators of competitive advantage (Barney, 1991).

Company performance measurement is a process to measure the efficiency and effectiveness of a company's activities. Performance measurement provides information on how well a company is running, whether the company can achieve the goals that have been set, and how effectively improvements have been made (Lakhal, 2009). Measurement of company performance describes the company's strengths and weaknesses at that time (David, 2017).

2.2 Hypothesis Development

In their research, Hult et al. (2004) assume that market turbulence can indicate buyer behavior or rapidly changing market behavior. The need for a wider market that causes rapid consumer turnover is therefore important to emphasize and offer new products or processes by combining various types of innovative activities to support organizational performance, especially in the pandemic era. One of the responses needed to deal with uncertain conditions with strategic decisions is to digitize the company's organizational functions with a strong belief that the influence of digital technology will be able to improve and expand the organization's operations (Quinton et al., 2018).

In terms of implementing a digital orientation, the capabilities of SMEs will be very different from the capabilities shown in large companies (Ardito et al., 2021). The characteristics of SMEs are more flexible, promoting a reactive business strategy in sustaining changing business opportunities compared to a rationally planned strategy (Quinton et al., 2018). Initiatives from SMEs play an important role in implementing digitalization; besides that, a proactive attitude can also direct SMEs to identify opportunities for growth (Quinton et al., 2018).

To produce digital-based innovation, SMEs tend to apply digital technology in all functional aspects and with the right mindset (Esho & Verhoef, 2018). Consistently, the application of digital orientation to SMEs will impact the development of new competencies and knowledge, which is an important aspect that can contribute to the resulting innovations, such as new products or processes (Hönigsberg, 2020). Uncertain environmental conditions due to market and technology uncertainty encourage SMEs to create digital thinking to continue to have a competitive advantage (Quinton et al., 2018). Based on the explanation above, the following hypotheses can be generated:

H1: The dynamic environment has a positive effect on digital orientation

In the context of digital products, digital capabilities are defined as the company's skills, talents, and expertise in managing digital technology for new product development (Khin & Ho, 2019). Companies that carry out digital transformation require organizations to develop several capabilities in many different areas according to the organization's needs. Companies with technological capabilities in the digital context thus provide an understanding of digital capabilities, which are an important requirement for achieving digital innovation because when successfully implementing the digitization process, it will depend on how well the company can manage digital technology (Khin & Ho, 2019).

Westerman et al. (2012) argue that digital capabilities are a fundamental building block that can transform customer experiences, operational processes, and business models. The emergence of changes in market desires because the composition expected by customers is different in a certain period allows for the offerings provided by the organization not to match the needs of the customer; therefore, the organization can modify its offerings to suit the needs of these customers (Westerman, 2012)

When customer preferences change, it is expected that the organization will have a stronger desire with the level of turbulence that occurs. In his research, Pratono (2016) argues that the unpredictable business environment makes SMEs fail due to a lack of information and skills. Therefore, adapted digital capabilities can provide positive values related to information technology so that various types of knowledge can be identified to provide various alternatives to survive (Pratono, 2016). Based on the explanation above, the following hypotheses can be generated:

H2: The dynamic environment has a positive effect on digital capabilities

Digital innovation, defined as the recombination of digital technology and physical components to create new digital products and enhance existing physical products with digital capabilities, is both an opportunity and a potential threat for companies (Khin & Ho, 2019). Digital innovation involves transformational changes in strategies, processes, and products and thus requires companies to rethink their organizational patterns. The growing importance of digital technology for enterprises is leading to the integration of IT strategy and business strategy in the general digital business strategy (Khin & Ho, 2019).

Digital innovation can be likened to something conducive where the organization will consider the pressures and needs of the interests of customers or suppliers (Liu & Cheng, 2018). Stakeholders can also be a source of knowledge encouragement to improve innovation performance in terms of developing new products and processes. For example, customers can provide information in terms of market behavior regarding desired or needed expectations about products or processes. In addition, suppliers can also provide knowledge directly involved in the joint innovation process (Liu & Cheng, 2018).

Organizations, especially SMEs, can be digitally oriented to generate innovation capabilities by highlighting the rapidly changing environment to achieve competitive advantage (Quinton et al., 2018). With a digital-oriented organization, SMEs can specifically target innovation development in a volatile environment so that they are committed to more complex resources because these resources will also allow organizations to develop new products and services by incorporating environmental needs into the product development process or the service (Quinton et al., 2018). Dibrell et al. (2015) said that environmental orientation or innovation is easier to communicate across SMEs because it will create a new, stronger identity. Based on the explanation above, the following hypotheses can be generated:

H3: The dynamic environment has a positive effect on digital innovation

Luccheti & Sterlacchini (2004) say that the opportunity for digitization in SMEs has been recognized because the opportunity for the application of information and communication technology (ICT) has also increased, triggering the role of technology which is added value in supporting SMEs. Changes can be made when SMEs are process-oriented to produce new processes and new products in SMEs (Khin & Ho, 2019). Digital transformation will be easier to adopt because the organizational structure and communication are simpler in SMEs, so the adoption of information technology in SMEs, even though it comes from conventional, will still be able to support their innovation performance (Khin & Ho, 2019).

Research from L. Ardito et al. (2021) explains the conditions for the transformation of SMEs related to the efficiency resulting from the digital orientation. SMEs that are committed to the application of digitalization, enthusiasm, and confidence among organizations will be seen clearly to provide the application of technology in the functioning of the organization itself. They will be better positioned digitally to identify new resources to reconfigure related processes or services (Khin & Ho, 2019).

This can increase their productivity more efficiently to save costs or human resources, but it can also provide increased process results from the organization's operations. Digital orientation helps provide new connections for organizations to compete widely, not limited to pre-explored markets (Khin & Ho, 2019). This will provide facilities for the development and management of knowledge resources to be able to enter and access wider knowledge so that innovation, in this case, will allow SMEs to modify activities or value creation processes that have never been applied before in terms of digitalization (Khin & Ho, 2019). Based on the explanation above, the following hypotheses can be generated:

H4: Digital orientation has a positive effect on digital innovation

In digital innovation, developing digital solutions requires an optimal level of understanding. Sandberg's research (2014) said that the generation that adopts digital capabilities is an ongoing organizational effort to maintain continuity between organizational strategy and information systems. Digital capabilities are built over a

long period by combining information technology resources with other organizational resources such as human resources, skills, structures, and activities (Sandberg, 2014).

The greater the digital capabilities a business has, the greater its digital innovation (Khin & Ho, 2019). The same statement was also made by Yasa et al. (2019) and Mesa et al. (2014), which reveals that the more digital capabilities one has, the more digital innovations can be made.

Technology capability refers to a company's capability to develop new products and services by aligning its strategy with innovative processes (Fernández-Mesa et al., 2014). These capabilities involve knowledge and skills in acquiring, using, absorbing, adapting, improving, and producing new technologies (Khin & Ho, 2019). Based on the explanation above, the following hypotheses can be generated:

H5: Digital capability has a positive effect on digital innovation

Conceptualizing a digital orientation requires integrating internal and external strategic elements. As the use of digital technology will continue to increase, the close relationship between technology suites and organizational processes and routines is important (Quinton et al., 2018). This requires a mix of elements of technology and organizational strategy with aligned mechanisms, where digital strategy is often seen as something different from business strategy (Bharadwaj & Pavlou, 2013). Therefore, an organization's digital orientation is defined as a strategic position directed to take advantage of the opportunities provided by digital technology. This positioning includes attitudes and behaviors that support the generation and utilization of market insights, proactive innovation, and openness to new ideas (Quinton et al., 2018).

Changes due to the current digital-based environment are beyond the company's control. Therefore, companies must be able to change their digital strategy to attract market changes (Quinton et al., 2018). By evaluating the company's strategy, managers can determine which key strategic areas need to be developed by correcting resource or skill deficiencies as an alternative to increasing core strengths. This analysis can inform the development of the company's competitive advantage (Quinton et al., 2018).

Insights must be created and applied across the organization to maintain the proactive attitude necessary to deliver competitive advantage and customer value (Quinton et al., 2018). It is necessary to identify how the company's current system supports or hinders the development of a digital orientation in the company. By understanding the factors that shape a digital orientation, SMEs can develop a relevant strategic position to compete in the digital environment (Quinton et al., 2018). Based on the explanation above, the following hypotheses can be generated:

H6: Digital orientation has a positive effect on competitive advantage

Digital technology is used to manage integrated product life cycles and improve efficient, reliable, and sustainable business operations. Intelligent production processes and supply chains can optimize a company's workflow and create a competitive business advantage (Berawi et al., 2020). Artificial intelligence, the internet, machine learning, blockchain, big data, and other digital technologies have created business resilience and changed people's behavior. Digitization creates new ways for companies to create the value-added business. Modernizing business enterprises by combining digital technology, physical resources, and individual creativity is important in transforming an innovative business that can become a competitive advantage (Berawi et al., 2020).

Companies need to change their business processes and improve their customer satisfaction by using digital technologies that connect people, systems, and products or make their services more effective and efficient (Berawi et al., 2020). Digital technology creates new ways for companies to integrate customer needs into product development or service delivery across the entire process chain, thereby creating a competitive advantage (Berawi et al., 2020).

Although new products highlight a company's innovation and prestige, some experts suggest that process and administrative innovation gives companies a greater competitive advantage than product innovation. The reason is that administrative processes and innovations are hidden within the company; as a result, it will be more difficult for competitors to reverse engineer and replicate these innovations as is often done easily and quickly with product innovations (Berawi et al., 2020). Based on the explanation above, the following hypotheses can be generated:

H7: Digital innovation has a positive effect on competitive advantage

Technology capability refers to a company's capability to develop new products and services by aligning its strategy with innovative processes (Fernández-Mesa et al., 2014). These capabilities involve knowledge and

skills in acquiring, using, absorbing, adapting, improving, and producing new technologies (Khin & Ho, 2019). These capabilities have enabled the development of new products and technologies, improved manufacturing processes and quality control skills, and predicted technological changes in the industry (DeSarbo, 2005). As a system, digital capabilities are provided through interactions between suppliers and other users that create value (Srivastava & Shainesh, 2015).

Kohli and Melville (2019) define it as an internal capability to provide customer information when needed. According to Heredia et al. (2022), digital capabilities are digital systems that produce new results and structures without the uncoordinated participation of third-party actors and without deliberate planning by the system makers. Digital capabilities have driven organizations to increase their competitive advantage in the marketplace (Heredia et al., 2022). In this regard, understanding the dynamics that affect the adoption of digital technology becomes critical to the organization's success.

The use of digital systems has helped companies to obtain important information related to company consumers. In this sense, the development of digital capabilities is gaining relevance in organizations enabling companies to use the information to reduce cost structures and redesign company processes (Heredia et al., 2022). Digital capabilities can help companies improve the quality of the products and services provided; therefore, digital capabilities increase competitive advantage (Ciampi, Demi, Magrini, Marzi, & Papa, 2021). Based on the explanation above, the following hypotheses can be generated:

H8: Digital capability has a positive effect on competitive advantage

Competitive advantage is one of the fundamental sources for business actors to achieve higher performance than competitors. These advantages can be achieved by utilizing resources that make the products produced more efficient and effective. An organization can create selling points and benefits that are better than its competitors, reflecting a competitive advantage (Torres et al., 2018).

The success of the organization can be measured by conducting a performance assessment in achieving its goals. Organizational performance in achieving its goals is influenced by the resources owned by the organization (Sicotte et al., 1998). The resources in question can be tangible or intangible. Organizational performance also describes the organization's capability to provide services to the community, and its performance can be measured using performance indicators that the organization has set.

A high-performance organization is an organization that runs smoothly without any internal pressure. Stability, predictability, and control are valued, while information management, communication, and decision-making are optimized as key processes. Based on the explanation above, the following hypotheses can be generated:

H9: Competitive advantage has a positive effect on organizational performance

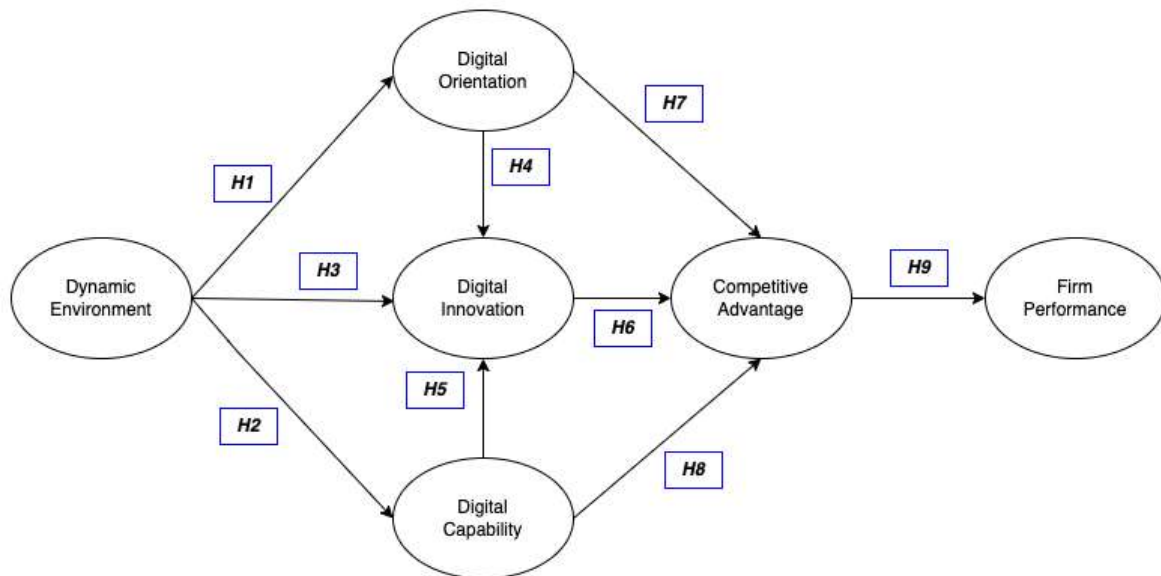


Figure 1. Research Model

3. Research Method

This study intends to analyze the impact of environmental dynamism on the competitive advantage and performance of FMCG SMEs in Indonesia through the role of orientation, capability, and digital innovation. This study uses quantitative methods and data collection techniques using a questionnaire survey method via a google form. The data to be analyzed is primary data obtained from the results of a questionnaire survey distributed to SMEs with a total of 216 respondents.

This study used an instrument in the form of a questionnaire using 5 Likert scales. The analytical method in this study uses Structural Equation Modeling (SEM) analysis. The research model is a second order that examines the measurement of 6 variables, 19 dimensions, and a total of 57 indicators, consisting of 6 dynamic environmental indicators (Hung & Chou, 2013), 12 digital orientation indicators (Dantsoho et al., 2020), nine digital capability indicators (Lu and Ramamurthy, 2011), 12 indicators of digital innovation (Kohli and Melville, 2017), 12 indicators of competitive advantage (Khaddam et al., 2020), six indicators of organizational performance (Ng et al., 2017).

4. Results and Discussion

4.1 Data Analysis

This study measures the size of the company with the type of business dominated by Food and Beverages. In addition, the company age can also affect innovative behavior, which in relation to the SMEs, if divided by one year and over one year, does not have a different significant value. In this study, all constructs were modeled as reflective constructs; hence, indicators must have a high proportion of variance (Hair et al., 2014). Indicator reliability, average extracted variance (AVE), and individual reliability (CR), as shown, can be checked to assess convergent validity (see Appendix). The loading of most of the items was above the threshold value of 0.5; however, thirteen measurement items were removed because their loading was less than 0.5 (Hair et al., 2014).

Table 1. Demographic Profile

Characteristics Profile	Category	Frequency	Percentage
Type of business	Food and beverages	135	65.2%
	Clothing	28	13.0%
	Agricultural products	13	6.0%
	Stationery	7	3.2%
	Cosmetic products	7	3.2%
	Accessories	4	1.9%
	Souvenir	3	1.4%
	Plant	3	1.4%
	Household appliance	3	1.4%
Ownership	Personal owned business	184	85.2%
	Jointly owned business	32	14.8%
Firm size (number of employees)	Less than 5	165	76.4%
	5-20	41	19.0%
	21-50	8	3.7%
	51-75	2	0.9%
Firm age	<5 years	178	82.4%
	5-10 years	30	13.9%
	>10 years	8	3.7%
Position	Business owner	202	93.5%
	Manager	14	6.5%

Structural model evaluation is a test of research hypotheses if the path coefficient produced has a t statistic above 1.96 then the relationship between variables has a significant influence.

Table 2. Hypothesis Test

Hypothesis	Hypothesis Statement	Path Coefficient	T Statistics	P Values	Results
H1	Dynamic Environment -> Digital Orientation	0.587***	9,079	0.000	Supported
H2	Dynamic Environment -> Digital Capability	0.447***	6,141	0.000	Supported
H3	Dynamic Environment -> Digital Innovation	0.076	1.087	0.277	Rejected
H4	Digital Orientation -> Digital Innovation	0.468***	6,179	0.000	Supported
H5	Digital Capability -> Digital Innovation	0.310***	4,664	0.000	Supported
H6	Digital Innovation -> Competitive Advantage	0.780***	9,689	0.000	Supported
H7	Digital Orientation -> Competitive Advantage	-0.157	1,622	0.106	Rejected
H8	Digital Capability -> Competitive Advantage	0.100	1.336	0.182	Rejected
H9	Competitive Advantage -> Firm Performance	0.248***	3,560	0.000	Supported

* sig 5%, ** sig 1%, *** sig < 1%

The dynamic environment has a higher direct influence on digital orientation and digital capability than digital innovation. Changes in market turbulence and technological turbulence have a direct effect on changes in digital orientation and digital capabilities. Digital innovation is directly influenced by digital orientation (path coefficient=0.468) than digital capability (path coefficient=0.310). Competitive advantage is directly affected by digital innovation and the other two variables, namely digital orientation and digital capability, have no effect on competitive advantage. Firm performance is significantly influenced by competitive advantage (path coefficient=0.248).

Table 3. Mediation Test

Mediation Test	Mediation Path Coefficient	T Statistics	P Values	Results
Dynamic Environment -> Digital Capability -> Digital Innovation -> Competitive Advantage -> Firm Performance	0.027	2,456	0.014	Mediation Test Accepted
Dynamic Environment -> Digital Orientation -> Digital Innovation -> Competitive Advantage -> Firm Performance	0.053	2,603	0.010	Mediation Test Accepted
Dynamic Environment -> Digital Innovation -> Competitive Advantage -> Firm Performance	0.015	1.022	0.307	Mediation Test Rejected

Mediation test means testing the indirect effect of a variable through other variables. The estimation results of the mediation test show that the dynamic environment can have a significant effect on firm performance through the influence of digital capability or digital orientation, digital innovation and competitive advantage.

4.2 Results

The results of the research conducted by researchers on 216 SMEs show that a dynamic environment can affect a digital orientation, where after processing the survey data, the t-statistic value is $9.079 > 1.96$. This supports the research conducted by Quinton et al. (2018), which states the response needed to deal with uncertain conditions with strategic decisions, one of which is digitizing the company's organizational functions with a strong belief that the influence of digital technology will be able to improve and expand the organization's operations so as to encourage SMEs to be able to create digital thinking in order to have a competitive advantage (Quinton et al.,

2018).

This research shows that the strongest dimension of the dynamic environment in influencing digital orientation is technological turbulence. With the environmental dynamism due to current technological developments, FMCG SMEs can adapt quickly to the use of existing technology. The understanding and confidence of SMEs in determining the direction of orientation to digitalization is very necessary given the many changes in the market environment due to current technological developments.

The focus of SMEs to prioritize digital use is now an absolute necessity, considering that there has been a shift in consumer lifestyle changes that are more practical due to technological advances in the market. The focus on the development and use of digital at this time is certainly very useful in helping SMEs make it easier to carry out their business activities. With digital turbulence encouraging the formation of a new digital ecosystem in the FMCG industry in Indonesia, if every SME actor does not try to adapt to existing changes, the possibility of these SMEs being left behind by other competitors will be even greater.

The results of this study indicate that a dynamic environment affects digital capabilities based on the t-statistic value of $6.141 > 1.96$; this supports the research conducted by Westerman et al. (2012), who argues that digital capability is a fundamental building that can change experiences customers, operational processes and business models. The emergence of changes in market demand because the composition expected by customers is different in a certain period allows for the offerings provided by the organization do not match the needs of the customer. Therefore the organization can modify its offerings to suit customer needs.

This research shows that technological turbulence has the strongest influence on the dynamism of digital capabilities. In adapting to a changing market environment, organizations need a strong drive; hence they can make changes and create new ideas. By looking at the increasingly rapid technological developments, FMCG SMEs see opportunities and potential growth in their business by taking advantage of these technological advances.

The easier it is for information to circulate related to digitization make it easier for SMEs to accept new knowledge related to digital. FMCG SMEs realize that current technological developments can help them improve their capabilities in various aspects of business needs. Both in terms of product and service marketing effectiveness or operational efficiency. The confidence of FMCG SMEs in improving their business capabilities towards digital is believed to be able to provide forgiveness in creating new business ideas that support their business growth. Various kinds of operational changes use the help of a good information system.

The results of this study indicate that a dynamic environment does not affect the digital innovation of FMCG SMEs. This does not support the research that has been carried out by Cheng (2018), where stakeholders can be a source of encouragement for knowledge to improve innovation performance in terms of developing new products and processes. For example, customers can provide information in terms of market behavior regarding desired or needed expectations about products or processes. In addition, suppliers can also provide knowledge that is directly involved in the joint innovation process. Pratono (2016) argues that the unpredictable business environment makes SMEs fail due to a lack of information and skills. Therefore, adapted digital capabilities can provide positive values related to information technology so that various types of knowledge can be identified to provide various alternatives to survive.

This explanation shows that FMCG SMEs require sufficient information, competent human resources, and an active and responsive attitude in developing a digital innovation. Some of these things are very important because in implementing a new business idea in a dynamic environment, an organization will face a risk of failure. To increase the success of changing new business ideas, it is necessary to have capabilities and good strategy implementation. Organizational capability in reconfiguring resources and processes that have been running within an organization is part of the strategic flexibility of an organization.

The results of this study indicate that digital orientation affects digital innovation. This supports the research by Khin & Ho (2019), where digital orientation helps provide new connections for organizations to compete widely, not limited to previously explored markets. This will provide facilities for the development and management of knowledge resources to enter and access broader knowledge so that innovation, in this case, will allow SMEs to modify activities or value creation processes that have never been applied before (Schneider & Spieth, 2013).

Through the results of this study, the strongest dimension that affects digital orientation toward digital innovation is the great curiosity of FMCG SMEs in Indonesia. The emergence of concerns about being able to continuously improve the products and services offered encourages FMCG SMEs to try to innovate in the digital field. It is unavoidable that the benefits that digitization can provide to the company's operational processes are very large companies both in providing added value and creating cost efficiencies.

In addition, digital use can be useful in exploring and studying various forms of potential and new opportunities in the market. SMEs that are diligent in conducting market analysis through digital use will find

growth potential for the company. Some of these opportunities can be captured by improving the quality of the products and services offered. Such as mapping the market in Indonesia, where every need of the people in Indonesia will be different from one region to another. With the curiosity of SMEs to meet the needs of the community, each company will adjust the availability of products and services offered according to the needs of the community in certain areas.

The results of this study indicate that digital capabilities influence digital innovation. This supports the research conducted by Khin & Ho (2019), where companies with digital capabilities provide an understanding of how to achieve digital innovation because the successfully implemented digitalization process makes the company have good technology management. Other studies that support where the greater the digital capabilities a company has in its business, the more digital innovations a company can have (Khin & Ho, 2019). The same statement was also made by Fernandez-Mesa et al. (2014), which reveals that the more digital capabilities one has, the more digital innovations can be made.

In this study, the dimension that most influences digital capabilities for digital innovation are the infrastructure that is already available within the company. Every business actor, especially SMEs, is competing to create a business profile through digital media. Awareness of the importance of digitalization for the business survival of SMEs is high enough to make it easier for SMEs to carry out digital innovations. This form of readiness is currently the main capital for FMCG SMEs in improving their digital capabilities.

The results of this study indicate that digital innovation influences competitive advantage. This supports the research conducted by Berawi et al. (2021), where digital technology creates new ways for companies to integrate customer needs into product development or service delivery across the process chain, thereby creating a competitive advantage. He continued his research that process and administrative innovation gave companies a greater competitive advantage than product innovation. The reason is that administrative processes and innovations are hidden within the company; as a result, it will be more difficult for competitors to reverse engineer and imitate these innovations as is often done easily and quickly with product innovations (Berawi et al., 2021).

The utilization dimension is the most influential for digital innovation on competitive advantage. Utilization at this time is one of the important factors related to how digital works in a business because with the company's ability to utilize digital, the company will know the mapping of people's needs at this time. Current technological developments are very dependent on the availability of databases due to companies can find out the priority needs to create products and services.

In addition, digital utilization can be used by companies to conduct market analysis where in the market analysis, the company can find out the strengths and weaknesses of competitors' products, both in the form of product quality, pricing policies, and the availability of goods at the company. The ability of SME players to innovate in the form of utilizing digital data will be very useful in creating a company's competitive advantage. Companies can easily differentiate products and prices, place product distribution and carry out a stock strategy.

The results of this study indicate that digital orientation does not affect competitive advantage. Based on research conducted by Quinton et al. (2018), insights need to be created and applied across the organization to maintain the proactive attitude necessary to deliver competitive advantage and customer value. It is necessary to identify how the company's current system supports or hinders the development of a digital orientation in the company. By understanding the factors that shape digital orientation, SMEs can develop a relevant strategic position to compete in the digital environment.

One of the obstacles that digital orientation does not affect competitive advantage is that SMEs do not fully understand and already have a clear strategy in their business. Through the results of this study, it can be explained that the digital orientation process formed by SMEs is based on a compelling impulse as a result of environmental changes due to technological developments, and they do not yet fully know the steps that must be taken so that this encouragement can be used as an advantage.

With disruptive technology, almost all industry players in Indonesia are forced to use digital to carry out their business activities, and this means that almost all SME players have been forced to use digital to run their business. Without an in-depth and clear analysis of the value of the products and services that will be offered, the digital orientation carried out by SMEs will run without success.

The results of this study indicate that digital capabilities do not affect competitive advantage. This does not support the research conducted by Ciampi et al. (2021), where digital capabilities can help companies improve the quality of products and services provided; therefore, digital capabilities increase competitive advantage. The ineffectiveness of the relationship between digital transformation and business model innovation has been discussed in the research of Heredia et al. (2022), where digital capabilities have driven organizations to increase their competitive advantage in the marketplace, but understanding the dynamics that affect digital technology adoption is critical to organizational success.

One of the obstacles that do not affect digital capabilities to competitive advantage is the limitation of

SMEs to utilize digital effectively and efficiently. These limitations are inseparable from the level of knowledge and information of SMEs in optimally utilizing digital to create a competitive advantage. Through this research, it can be illustrated that the level of education is very influential on the use of digital as a competitive advantage.

The current form of influence of digital capabilities is more about technology disruption, where digital transformation changes most of the business model arrangements in the SME industry. Innovation is closely related to the capabilities of companies that want to be involved in innovation, such as the introduction of new processes, products, or ideas in the organization (Keillor & Hult, 2004). Therefore, this research shows that the innovation process plays an important role in encouraging the digital capabilities of SMEs to become a competitive advantage. The innovation process carried out by SMEs is expected to be able to create clear and beneficial product value for the community.

The results of this study indicate that competitive advantage affects organizational performance. This supports the research conducted by Torres and Feraz (2018), where competitive advantage is one of the fundamental sources for business actors to achieve higher performance than competitors. These advantages can be achieved by utilizing resources more efficiently and effectively, and it can encourage organizations to create better selling value and product benefits.

In addition, the results of this study also support the research that has been done previously by Peteraf and Barney (2003), where an organization that has achieved a competitive advantage has created more economic value than its competitors. Economic value is generally created by producing products and or services with greater benefits at the same cost compared to competitors or the same benefits at lower costs than competitors. Products or services with superior benefits increase customer loyalty and perceived quality (Zou, Fang, & Zhao, 2003).

In this study, the highest dimension of competitive advantage that affects performance is flexibility. The flexibility of SMEs will increase considering that the development of knowledge in the digital field is very useful to help the operational processes of SMEs. It can be proven at this time that most SMEs are currently using digital applications to make it easier for organizations to carry out their operations, in addition to assisting in the internal evaluation of the use of digital applications to increase the efficiency and effectiveness of the organization in running its business. In addition, increasing the capabilities and knowledge gained by SME organizations in the digital field is certainly very helpful in increasing product and service innovation.

5. Conclusion and Implications

5.1 Conclusion

This study proves that environmental dynamism is one of the basics for establishing a direct relationship to the digital orientation and digital capabilities of FMCG SMEs. The results of these studies help provide the latest results and support the research carried out by Quinton et al. (2017) and Cheng (2020) related to the influence of environmental dynamism on the formation of digital orientation and digital capabilities. This research proves that digital orientation and digital capabilities are the basics for the formation of digital innovation. Based on research by Khin & Ho (2018), digital orientation helps provide new connections for organizations to compete widely, not limited to previously explored markets. This will provide facilities for the development and management of knowledge resources to enter and access broader knowledge so that innovation, in this case, will allow SMEs to modify activities or value creation processes that have never been applied before in terms of digitization. Then he continued in his research related to digital capabilities that companies that have technological capabilities in a digital context, thus providing an understanding of digital capability which are an important requirement for achieving digital innovation because when successfully implementing the digitization process it will greatly depend on how well the company can manage digital technology.

This study also supports Berawi et al. (2021) that digital technology creates new ways for companies to integrate customer needs into product development or service delivery across the process chain, thereby creating a competitive advantage. He continued his research that process and administrative innovation gave companies a greater competitive advantage than product innovation. The reason is that administrative processes and innovations are hidden within the company; as a result, it will be more difficult for competitors to reverse engineer and imitate these innovations as is often done easily and quickly with product innovations (Berawi et al., 2021). The results of this study indicate that digital innovation has a positive influence on competitive advantage.

Although the results of this study do not affect the environmental dynamism of the formation of digital innovation, it is interesting enough to be used as an evaluation for SMEs related to the problems that limit the influence of environmental dynamism on the formation of digital innovation. The previous analysis has discussed that the influence between environmental dynamism and digital innovation still requires several steps, one of which is through digital orientation and digital capabilities. It still needs gradual development so that environmental changes can directly have an impact on the formation of FMCG SME digital innovations.

Digital orientation and digital capabilities do not have a direct influence on competitive advantage because in establishing competitive advantage, concrete strategic steps are needed, one of which is by making digital innovations so that the value and benefits offered in the form of products and services can be felt directly by the customers. There are several updates through the results of this study where digital orientation and digital capabilities have a mediating role in shaping the influence of the relationship between environmental dynamism on digital innovation. Besides that, the role of digital innovation is considered to mediate the relationship between digital orientation and digital capability on an organization's competitive advantage.

5.2 Managerial Implications

Digital orientation, digital capability, and digital innovation play an important role in driving competitive advantage and company performance when the dynamic environment is turbulent. The development of technology is getting faster, encouraging and forcing business actors, especially in the FMCG SME Industry, to explore more information and knowledge related to digitization. Through the results of this study, it can be proven that the turbulence caused by technological developments has a large enough impact on environmental changes in the FMCG SME industry market.

The innovation process is very important in a changing environment because by innovating, FMCG SME players can improve the quality of products and services. Besides that, they can seek new opportunities in the market by creating new products that suit the community's needs. However, the reality is that at this time, there are still shortcomings that need to be improved by FMCG SMEs in optimizing their digital orientation and capabilities to help companies increase digital innovation. Several evaluations need to be carried out so that some of the FMCG SME problems that arise in this research can be improved and benefit the FMCG SME business in the future.

The biggest obstacle for SMEs in most parts of Indonesia is limited resources. Digital-related capital resources become an obstacle because not all FMCG SMEs spread across Indonesia have adequate and qualified digital facilities. With the large area in Indonesia, the possibility of obstacles to accessing the internet is still very large; even if available, each region will bear different digital operational costs, even though the government has in recent years tried to improve the quality of communication infrastructure.

These limitations greatly impact SMEs when there is a flow of information on new changes entering the industry. This impact is that many SMEs are late and are not ready to react and adapt to environmental changes. So, concrete steps are needed to focus on utilizing digital facilities to become an important part of the FMCG SME business. The concrete step is to provide a number of capital that is properly utilized to take advantage of digital services, such as providing qualified internet access is a top priority, starting to learn digital for business, and attending seminars related to digital business. Some of these steps are very important because, based on research that has been carried out, SMEs will not be able to increase their competitive advantage without a strong digital attitude and capability. Some of these steps are very important for companies in carrying out the innovation process because only through the innovation process can companies achieve a competitive advantage.

In addition, the skills and knowledge of SME human resources need to be improved because increasing digital orientation and capabilities can be useful in improving business analysis in the digital field. At this time, everyone is competing to obtain data in digital business. The meaning of big data that can be obtained by business actors is how every company that has this data can monetize digital into a productive business. Improving the ability of digital business analysis is very useful for SMEs in mapping community needs. Perform analysis related to the high and low needs of a product in the market. By knowing these needs, the company is taking other innovative steps in the form of repairs and improving the quality of products needed by the community. Providing products that follow the community's wishes is an important value in competitive advantage because not all competitors are aware of and carry out business analysis through digital.

Increasing digital business analysis is also very important in knowing product trends in the market; every increase and decrease in the trend must be analyzed properly because it is related to the level of competition for the company's products in the market. With this capability, SMEs can implement better marketing strategies, such as providing products, determining prices, determining distribution channels, and providing anticipatory steps from changes in product trends that can occur at any time. The availability of various e-Commerce platforms at this time has helped SMEs. However, the availability of these platforms without the ability and desire to deepen their digital business analysis skills will be wasted.

5.3 Research Limitations

The limitation of this study is that the study was only conducted on 216 FMCG SMEs in Indonesia. Every company or industry has a different character where several special factors support digital orientation, digital

capability, and digital innovation. In addition, there are limitations of time and place, so in conducting this research, most of the communication is done digitally.

This research was conducted during the economic and health crisis due to the Covid-19 pandemic, so the sample obtained in this study was very limited, amounting to 216 samples, which impacted the validity of several research indicator factors.

5.4 Suggestions for Further Research

For further research, it is recommended to review the relationship between digital orientation and capability to competitive advantage. Whether the relationship between these three variables can have a positive effect only through digital innovation or indifferent and normal economic climate conditions can change the shape of the influence between digital orientation and capability on competitive advantage.

This research was only conducted on 216 FMCG SMEs in Indonesia. It is necessary to redevelop the results of this study on the number of companies and types of different industries but with the same working area and environmental culture. In addition, based on the limited sample size in the study, it would be better if, in the next study, the sample size used was larger than the sample in this study. This is useful for increasing the validity of research indicators.

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Appendices

Tabel 4. T-Test

Group Statistics					
	Usia UKM	N	Mean	Std. Deviation	Std. Error Mean
Digital Orientation	1 year	44	4,1523	,55886	,08425
	>1 year	172	4,1593	,53941	,04113
Digital Capability	1 year	44	4,2545	,65750	,09912
	>1 year	172	4,3279	,59425	,04531
Digital Innovation	1 year	44	4,1970	,51554	,07772
	>1 year	172	4,1951	,60821	,04638

Tabel 5. Discriminant Validity

	Business Environment	Digital Capability	Digital Innovation	Digital Orientation	Competitive Advantage	Firm Performance
Business Environment	0,865*					
Digital Capability	0,447	0,796*				
Digital Innovation	0,489	0,651	0,743*			
Digital Orientation	0,587	0,656	0,716	0,790*		
Competitive Advantage	0,204	0,505	0,733	0,467	0,829*	
Firm Performance	0,246	0,280	0,324	0,423	0,248	0,929*

*AVE

Tabel 6 Measurement Table

Construct	Items	Items wording	Loading Factor	Composite Reliability	Average Variance Extracted
Dynamic Environment					
Market Turbulence	GP1	Our company's customers pay great attention to product prices	0,678	0,750	0,501
	GP2	Our company is trying to meet the demands of new customers in terms of products and services	0,764		
	GP3	The needs of our company's new customers tend to be different from those of old customers	0,679		
Technological Turbulence	GT1	Technological changes provide great opportunities for our company's business development	0,755	0,881	0,714
	GT2	Technological changes encourage our company to create new ideas for business services	0,885		
	GT3	Technological changes encourage our company to create new ideas in product development	0,887		
Digital Orientation					
Digital Curiosity	KI1	Our company is constantly looking for new ideas to update its digital product and services	0,893	0,887	0,798
	KI3	Our company is very curious about the digital ecosystem and the opportunities it brings	0,893		

Digital Openness	KT2	Our customers have access to information regarding our product and services	0,800	0,818	0,693
	KT3	Our company has control over every customer activity that can enhance product and service value creation	0,864		
Digital Alert	KW1	Our company can quickly recognize regulatory changes in the digital ecosystem	0,784	0,832	0,622
	KW2	Our company can quickly detect shifting consumer trends in the digital ecosystem	0,804		
	KW3	Our company monitors the flow of information on its digital platform	0,778		
Digital Innovative Passion	HI1	Our company continues to develop capabilities to compete in the digital ecosystem	0,745	0,845	0,646
	HI2	Our company is willing to accommodate new technology and the challenges it brings	0,829		
	HI3	Our company is committed to providing customers with a great digital experience	0,833		
Digital Capability					
Infrastructure	INF1	Our company has provided an online store to facilitate customers to make transactions digitally	0,763	0,804	0,674
	INF2	Our company already has a company profile in digital form in online media	0,875		
Business Cognitive	JB2	Digital media is important for our company as a place for marketing activities for our product and services	1,000	1,000	1,000
Proactive	SP1	Our company regularly updates knowledge in the digital field	0,891	0,853	0,743
	SP2	Our company believes that digital media can help companies run their business well	0,832		
Digital Innovation					
Initiate	IS1	Our company sees an opportunity that can be exploited from the current digital developments	0,930	0,879	0,784
	IS3	Our company sees threat that can harm our company's business with digital developments	0,839		
Develop	PB2	Our company develops products and services that are different from other companies	0,851	0,779	0,639
	PB3	Our company develops product and services according to market demands and needs	0,745		
Implement	IMP2	Our company conducts training for employees related to increasing knowledge related to digital	0,933	0,927	0,863
	IMP3	Our company uses digital systems to help the company's operational processes	0,925		
Utilization	PM1	Our company leverages customer data to create new value from the product and services provided	0,852	0,889	0,729
	PM2	Our company utilizes the data obtained to determine customer wants and needs	0,897		
	PM3	Our company is always making improvements to the products and services that have been provided	0,810		

Competitive Advantage					
Cost	B1	Our company is able to offer low product prices because it is able to reduce production costs	0,798	0,852	0,658
	B2	Our company is able to offer cheap services because it takes advantages of technological developments	0,764		
	B3	Our company has sufficient budget to improve production and service standards	0,868		
Quality	KL1	Our company is able to maintain the characteristics of its product and services	1,000	1,000	1,000
Creativity	KV1	Our company always carries out operational development by utilizing technological developments	0,934	0,929	0,868
	KV2	Our company always takes advantages of technological advances in improving the production process	0,93		
Flexibility	FLE1	Our company is always making changes to products and service to meet customer needs	0,798	0,828	0,707
	FLE3	Our company is always actively seeking the latest information regarding changing market conditions	0,881		
Performance					
Financial	KU1	The business I manage has higher sales growth than competitors (during the pandemic)	0,904	0,924	0,801
	KU2	The business I manage has a higher profit increase than competitors (during the pandemic)	0,909		
	KU3	The business I manage has good financial cash flow (during the pandemic)	0,872		
Non-Financial	NK1	The business I manage is able to maintain customer satisfaction (during the pandemic)	0,831	0,873	0,697
	NK2	The business I manage has a higher growth in the number of customers than competitors (during the pandemic)	0,819		
	NK3	The business I manage is able to maintain employee satisfaction (during the pandemic)	0,855		