ATESTASI: JURNAL ILMIAH AKUNTANSI
Vol 7, Issue 1, (2024), 730 - 747

Digital Capabilities as An Effort to Increase Competitive Advantage and Firm Survival in Micro Business

Yogi Sugiarto Maulana [1*] Dian Hadiani [2] Siti Nurjanah [3]

[*1] STISIP Bina Putera Banjar, Banjar, Jawa Barat, 46321, Indonesia
[2,3] STISIP Bina Putera Banjar, Banjar, Jawa Barat, 46321, Indonesia

Email
4091.sm@gmail.com [1*]

Received: December, 21, 2023 **Revised:** March, 21, 2024 **Accepted:** March 31, 2024

Abstract

One of the main weaknesses of microbusinesses in surviving the crisis is their inability to adapt and their lack of resources. Knowledge and skills are essential resources for increasing competitive advantage. For this reason, this study aims to analyze the influence of digital capability on competitive advantage and its impact on firm survival in micro businesses. The research method used is a survey research method. The respondents in this study amounted to 108 microbusiness owners in the Ciamis Regency. The data obtained was analyzed using the structural equation model (SEM) with the help of SmartPLS software version 3.2.9. The study results show that digital capability positively and significantly affects competitive advantage and firm survival. In addition, competitive advantage positively and substantially affects firm survival. A competitive advantage can also mediate the influence of digital capabilities on firm survival positively and significantly. We found that digital capabilities, rather than business capabilities, influence firm survival more. Therefore, microbusiness actors are advised to increase their knowledge and skills through training and strategic cooperation. These results support the resource-based view (RBV) theory, which has proven relevant and can be used in microbusiness.

Keywords: Micro-business, Resource-based view (RBV), Firm survival, Business sustainability.

DOI : https://doi.org/10.57178/atestasi.v7i1.926
p-ISSN : 2621-1963
e-ISSN : 2621-1505

Introduction

The rapid shift towards online business operations intensifies the demand for digitally literate individuals who can assist traditional businesses in transitioning to the e-commerce landscape. In today's digital age, mastering digital skills is not merely an advantage but a necessity for driving innovation and maintaining competitiveness. Entrepreneurs who recognize this reality increasingly prioritize developing digital capabilities, understanding that these capabilities are essential knowledge resources for their companies. Knowledge, particularly when intertwined with digital technology, becomes a formidable asset. It is one of the most complex and challenging resources to replicate, and when effectively harnessed, it can lead to maximum business outcomes, aligning with the company's strategic goals. As digital technology continues to evolve at a breakneck pace, companies must ensure that their internal capabilities are agile and responsive to these advancements. This is especially critical

as digital innovation increasingly dominates the business landscape. The successful use and application of digital technology in supporting business processes require access to technological resources and the knowledge and skills to leverage these resources effectively (Bharadwaj et al., 2013). This involves exploiting personal and organizational resources, tapping into potential, and developing the necessary capabilities to operate in a digitally driven environment. Digital capabilities are not just about adding value; they are integral to sustainable business success. These capabilities emerge from the strategic combination of information and communication technology resources, corporate assets, managerial expertise, business strategies, and organizational synergies. Given each company's unique blend of resources and circumstances, digital capabilities are likely to vary significantly across different organizations (Bi, 2011).

This variance underscores the importance of tailoring digital strategies to fit a company's specific needs and strengths, thereby enhancing its ability to innovate, compete, and thrive in a rapidly changing business environment. According to data from the Ministry of Cooperatives, Small, and Medium Enterprises (KUKM), in 2018, the number of MSME actors was 64.2 million, or 99.99% of the number of business actors in Indonesia. The absorption capacity of MSME labor is as many as 117 million workers or 97% of the absorption capacity of the business world's workforce. While large business actors, who make up only 5,550 or 0.01% of all business actors, contribute the remaining 38.9% of the national economy (GDP), MSMEs account for 61.1% (Depkop, 2018). Based on this data, Indonesia has the potential for a solid national economic base because the number of MSMEs, especially micro-enterprises, is enormous, and the absorption capacity of the workforce is vast.

To enhance the economic impact of micro-enterprises, both the government and business stakeholders must facilitate their transition into medium-sized enterprises. Micro-enterprises have demonstrated resilience in the face of economic crises, owing to their swift transaction turnover, reliance on domestic production, and direct engagement with the primary needs of local communities. These characteristics make them a vital component of the national economy. However, several structural challenges must be addressed to realize their full potential. Among the most pressing issues are the quality and consistency of production, which directly affect the ability of these businesses to compete on a larger scale. Additionally, micro-enterprises often need more access to marketing channels, which hinders their ability to reach broader markets and grow their customer base. Packaging, an essential aspect of product appeal and differentiation, is another area where micro-businesses frequently need to catch up, impacting their competitiveness. The quality of human resources, particularly in managerial, financial, and production roles, poses a significant challenge. Enhancing the skills and expertise of business actors in these areas is crucial for improving operational efficiency and driving growth.

Based on a review of empirical studies conducted by Sallatu and Indarti (Sallatu & Indarti, 2018) On the topic of company survival, several factors can be considered as determining factors for the survival of the company, such as business orientation (Hakala, 2013); product Innovation (Cefis & Marsili, 2006; Löfsten, 2016) human resource reputation (Berbegal-Mirabent et al., 2015); business planning (Indarti & Langenberg, 2004; Löfsten, 2016); business model innovation (Velu, 2015), Finally, the results of Naidoo's research, 2010 show the relationship and influence of competitive advantage on performance (Naidoo, 2010).

Based on these factors, the author conducted a survey and observation on the condition of micro-businesses in Ciamis Regency, West Java. Based on data from open data.jabarprov.go.id, microbusinesses in Ciamis Regency, West Java, have experienced a significant increase from year to year. The following is data on the number of micro-businesses in Ciamis Regency in 2017–2023.

Table 1. Number of Micro Enterprises in Ciamis Regency in 2017 – 2023

Year	Number of Micro Enterprises	Increased Per year	Percentage
2017	14,605		
2018	14,185	-420	-2.88%
2019	14,237	52	0.37%
2020	14,610	373	2.62%
2021	15,147	537	3.68%
2022	15,937	790	5.22%
2023	16,772	835	5.24%

Source: opendata.jabarprov.go.id (data processed)

Based on the data above, microbusinesses in Ciamis Regency have experienced a steady increase, although from 2020 to 2022, they experienced shocks due to the COVID-19 pandemic. In addition, the location of the microbusiness that we surveyed is strategic, namely in the downtown area, which is one of the competitive advantages of microbusiness actors in Ciamis Regency. Competitive advantage is one factor affecting business sustainability (Naidoo, 2010). When an effort outperforms its competitors, it successfully applies a competitive advantage. According to Porter (1989), this type of positioning in an industry or market segment leads to a competitive advantage from the point of view of cost leadership or differentiation. However, this viewpoint has changed with the development of the resource-based view theory, which emphasizes resource variables and capabilities (Porter, 1989).

A competitive advantage maintained for a long time eventually leads to higher performance (Peteraf, 1993). Resource theory ignores human power and its ability to blend all factors and assets appropriate for consistently achieving a specified target. Knowledge is the most complex and challenging resource to replicate. Based on this presentation, micro-businesses need knowledge resources during the COVID-19 pandemic and in the digital era. One of them is the ability to use the internet and information technology for business activities, especially marketing activities. This is because technology is now a new source of competitive advantage for some organizations. Several studies reveal that business continuity is influenced by information technology capabilities (Wilbon, 2015; Donkor et al., 2017; Erkmen et al., 2020). Although many activities have to run unusually/normally, it turns out that several businesses take opportunities and reap profits during a pandemic, such as Online Commerce (E-commerce).

They were related to the use of information technology for business activities. Researchers observed the phenomenon of micro-businesses in the Ciamis Regency related to the ability to use the internet and information technology for business purposes. As a result of these observations, the researcher found that several micro businesses in Ciamis Regency utilize the internet and information technology to market their products. The ability to utilize information and communication technology carried out by micro business actors in the Ciamis Regency is suspected to be one of the factors that will help them survive.

Micro-entrepreneurs' use of digital technology has grown since the COVID-19 pandemic, forcing them to use digital technology so that their businesses can survive. Firm survival is critical, not only for themselves but for the country, because many benefits can be obtained with the existence of these MSMEs, one of which is the most significant contribution to state revenue. Therefore, having a firm survival plan is very important so that the organization/entrepreneur can continue to exist by preventing and absorbing change and regaining the initial level of performance after an unexpected disruption (Hendry et al., 2019).

Literature Review

Evolution of Digital Marketing in the Context of Financial Reporting

Based on the search results on the Scopus database using the search key string "firm survival," 780 documents were found. Next, we conducted a more in-depth search of the results by entering the search keywords: SMEs OR MSMEs OR "small medium enterprise" OR "micro small medium enterprise," resulting in 176 articles. Furthermore, we limit English-language research and articles sourced from procedural conferences and journals. The final results of the search revealed as many as 153 documents. Based on the mapping results on firm survival, it is known that, in general, it is seen from the perspective of MSMEs. Furthermore, from the MSME side that explained the role of information technology in the survival of business companies, only three studies were found (Wilbon, 2015; Donkor et al., 2017; Erkmen et al., 2020). The three articles have two that discuss information technology capabilities from the information technology perspective. We also found that e-business capabilities can improve competitive performance (Uwizeyemungu et al., 2014). The most common approach is to use a qualitative approach, in which many researchers observe how entrepreneurs can adapt quickly to unexpected disruptions (economic crises, disasters, outbreaks) and how they use their resources and dynamic capabilities to deal with such events, or in other words, observe firm survival in depth without attributing to other variables. Casalino's research (2020) discusses an effective and successful digital transformation process for MSEs so that the business has resilience based on assumptions of decision-making, organizational change, change management, risk prevention, and knowledge management (Casalino et al., 2020). Based on this presentation, research has yet to be conducted on firm survival in microbusinesses. For this reason, this study uses a quantitative approach to determine the factors that affect firm survival, especially in micro businesses. We propose several variables suspected of affecting firm survival, namely digital capability and competitive advantage.

Digital Capability

According to Jay Barney (1991), capability refers to the Resource-Based View theory, which says that a company must be able to utilize various kinds of internal resources, including its human resources, to achieve business sustainability (Barney, 1991). Dethine et al. (2020) said that today's organizational resources have been greatly influenced by digital technology, so companies must think about more specific capabilities to solve the internal affairs of business organizations (Dethine et al., 2020). Digital capability is the ability of companies to apply digital technology to increase competitiveness in three ways: enriching the customer experience, transforming operational processes, and reinventing business models

(Royyana, 2021). Digital capability is an organization's ability to use resources effectively to achieve its overall goals and objectives. This results from exchanging knowledge and continuous improvement through the organization's human resources. The concept of capability is multidisciplinary and has many aspects. Digital capabilities combine the expertise and skills of people (staff) in an organization with the organization's capacity to leverage that expertise. Therefore, the organization's ability to rely on systems, frameworks, processes, and tools to achieve results (Melhem & Jacobsen, 2021).

Based on some of these expert opinions, digital capability refers to the skills and attitudes individuals and organizations need to develop in the digital world. At the individual level, digital capability includes skills that enable a person to live, learn, and work in a digital society. Digital capability is one of the knowledge resources that allows companies to excel in competition and adapt to changing market conditions due to economic and natural conditions. The concept has not been widely researched, and the author has only found several pieces of literature that lead to testing the concept, including Xia (Xia et al., 2022) and Diandra (Diandra & Syahputra, 2021), which examines the relationship between digital capabilities and firm survival. Digital/internet technology and the ability to use digital technology are also important because they can increase competitive advantages (Correia et al., 2020; Maulana et al., 2022; Wahyuningtyas et al., 2023). Digital capability improves operational efficiency, reduces costs, and gains a competitive advantage for businesses (Nambisan et al., 2017; Vial, 2021). However, we have yet to find knowledge resources in the form of digital capabilities that can improve firm survival through competitive advantage. Based on this description, we propose the following hypothesis:

H1: Digital capability has a positive effect on competitive advantage.
H2: Digital capability has a positive effect on firm survival.
H4: Competitive advantage mediates the influence of digital capability on firm survival.

Competitive Advantage

Competitive advantage is the ability of a company to be much higher and superior compared to competitors in similar industries through characteristics and resources that are managed to the maximum. A company has advantages if it has attributes such as a smoother distribution channel, sound quality or quality, delivering products to consumers more smoothly, and having well-known products. According to Dalimunthe (2017), competitive advantage is the ability to create a competitive advantage to compete with competitors (Dalimunthe, 2017). In addition, Musonnafa & Djazuli said that competitive advantage is the ability of a company to produce goods or services more effectively or cheaply than its competitors (Musonnafa & Djazuli, 2022). Competitive advantage is a benefit strategy from companies collaborating to create a more effective competitive advantage in their market (Rambing et al., 2022). Some main approaches companies can use to gain a competitive advantage are: 1) Cost: Providing goods at the lowest possible cost. Offer goods or services that stand out from competitors in terms of features. 2) Quality, or supply. 3) Focus: Providing tailor-made goods and services with specific markets in mind (Nahuway & Noermijati, 2018; Waithaka, 2020; Musonnafa & Djazuli, 2022). These three components allow the company to

outperform its competitors in the market in terms of sales or profit marginalization (Nahuway & Noermijati, 2018; M'mbwanga & Anyieni, 2022). In addition, a concept of competitive advantage is anything that gives the company an advantage over its competitors, allowing it to attract more customers and increase its market share (Alqershi et al., 2020). From some of these opinions, it can be concluded that for a company to be superior to competitors, it must have specific strategies and pay attention to the company's performance so that it improves from time to time. If that happens, then the company can be said to have a competitive advantage.

Companies must build and maintain a competitive advantage in today's highly competitive business environment to survive and succeed in the market (Poi, 2023). Another almost identical opinion says resilient companies must overcome obstacles and develop diverse sources of competitive advantage to survive (Savino et al., 2017; Niemimaa et al., 2019). Competitive advantage is one factor affecting business sustainability (Naidoo, 2010). Based on this description, we propose the following hypothesis:

H3: Competitive advantage has a positive effect on firm survival.

The statements that measure the competitive advantage we use are based on the adoption of Correia, et al (2020), which consist of 5 dimensions, namely: strengthening marketing strategies, internal capabilities, external response, price, and location and access. From the 5 dimensions, it is broken down into 10 indicators (Correia et al., 2020).

Firm survival

Resilience is a multidimensional and multidisciplinary concept that relates to various fields. Resilience is critical today as the business environment becomes more dynamic and unpredictable (Reeves & Whitaker, 2020). According to experts, resilience in business is that resilient companies need to overcome obstacles and develop diverse sources of competitive advantage to survive (Savino et al., 2017; Niemimaa et al., 2019). Naidoo (2010) Defines firm survival as the organization's resources and capabilities that the company can use to manage its economic conditions and performance (Naidoo, 2010). Another opinion is that firm survival is the ability of an organization to adapt quickly to disruption while maintaining sustainable business operations and protecting people, assets, and overall brand equity (Aryawati, 2020). A resilient organization is the best place to survive an economic slowdown and escape uncertainty. With the economic outlook bleak, many companies are realizing that having a resilience plan in place can help shore up cash flow, protect balance sheets, and differentiate them from competitors (Aryawati, 2020). Furthermore, business resilience has been conceptualized as an organization's ability to prevent and absorb change and regain initial performance after an unexpected disruption (Hendry et al., 2019). In essence, not only can it survive the shock of an intermittent crisis and recover from it, but it can also adapt to risks (Xia et al., 2022). Variable firm survival measurements were obtained from Reeves & Whitaker (2020), which consisted of 6-day items of Redundancy, diversity, Modularity, evolvability, Prudence, and Embeddedness (Reeves & Whitaker, 2020).

After conducting an empirical literature review, the researcher proposed four hypotheses with three primary constructs and eight dimensions. Therefore, the hypothesis developed

structurally leads to the conceptual framework of the research, which is then explored through survey data to measure variables statistically. The following is the conceptual framework of this study:

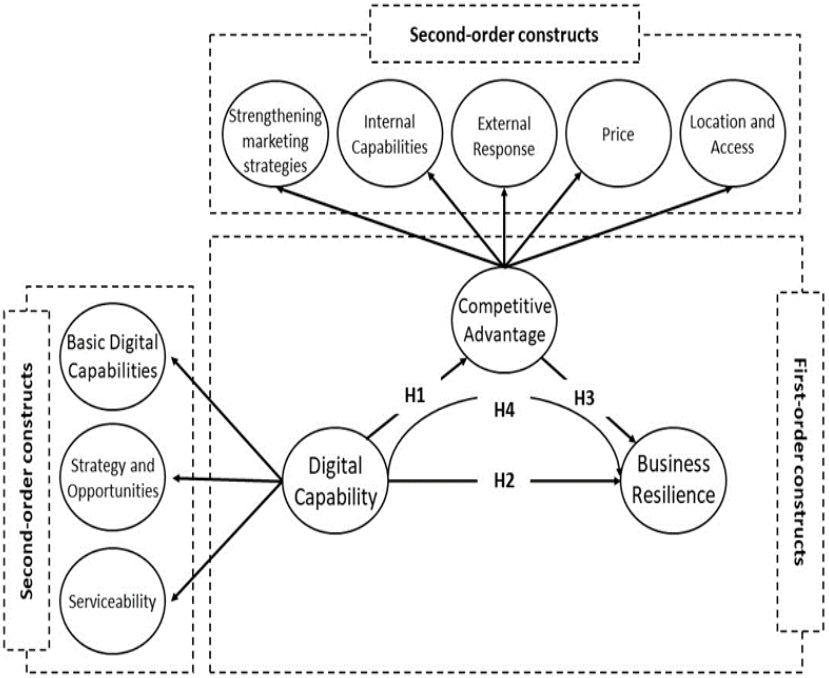

Figure 1. Conceptual Framework

Research Design and Method

This study adopted the research method with exploratory analysis by the second-order structural equation model (SEM). In contrast, the conceptual model framework was examined empirically with Smart PLS to identify empirical data based on a literature review (Mia et al., 2022). The paradigm in this study is positivism or the quantitative paradigm. In summary, we describe the stages of the research as follows:

Data Collection Techniques

Data Collection Techniques

We collect data by browsing data sources through reading and studying documents and other written materials, such as books and documents related to the variables studied. We made direct observations on the object of study. We record and encode a series of behaviors and atmospheres related to the activities of the studied object. We will also conduct interviews by asking direct questions, and respondents' answers will be recorded to complete the research data. Sampling in this study was carried out using the probability sampling technique, which uses a simple random sampling technique. We distributed questionnaires to 108 microenterprises in the Ciamis Regency. The list of questionnaire statements is taken from the following variable indicators:

Table 2. Operational Variable

Variable	Dimension	Indicator	Code
Digital Capability (DC) (Annarelli et al., 2021)	Basic Digital Capabilities (BDC)	• Basic level of ability in digital use • Level of understanding of digital functions and benefits	BCD1 BDC2
	Strategy and Opportunities (SO)	• Consumer response to interest in using e-markets • Features of the e-market strategy used • Introduction of new products to consumers through digital capability • Speed and accuracy in using the application	SO1 SO2 SO3 SO4
	Serviceability (SVC)	• Increased digital capability resources • Customer satisfaction level	SVC1 SVC2
Competitive Advantage (CA) (Correia et al., 2020)	Strengthening Marketing Strategies (SMS)	• Analyze market needs and wants • Online marketing strategy to attract customer interest	SMS1 SMS2
	Internal Capabilities (IC)	• Maintain product quality and/or improve product quality • Product innovation	IC1 IC2
	External Response (ER)	• Growth in product sales • Increased demand	ER1 ER2
	Price (PR)	• Competitive price • Sales level	PR1 PR2
	Location and Access (LA)	• Position and place of business • Vehicle access	LA1 LA2
Firm survival (BR) (Reeves & Whitaker, 2020)	-	• Redundancy • Diversity • Modularity • Evolvability • Prudence • Embeddedness	BR1 BR2 BR3 BR4 BR5 BR6

Data processed by the author (2024)

Data Analysis and Processing

Data analysis is a systematic process guided by empirical data execution methods and which research design methods are appropriate (Tobi & Kampen, 2018). In this study, conceptual models are generated through literature, which is used to collect predictions of relationships between constructs drawn through hypotheses. Our statistical test uses the Structural Equation Model (SEM) analysis tool with the help of SmartPLS software version 3.2.9 (Ringle et al., 2015). The analysis was carried out in three stages: Outer model analysis, Inner model analysis, and hypothesis testing. In addition, based on the proposed model, namely the SEM second-order model, we use the disjoint two-stage approach, where at the stage of analyzing the outer model, we do two steps (stages). The first step is to evaluate the outer model at the dimensional level, and the second is to evaluate the outer model at the variable level and the structural model (Sarstedt et al., 2019).

Results and Discussion

Characteristics Respondent

In this section, the characteristics of respondents are presented based on demographics, including gender, age, and educational background. The following is a table of profiles/descriptions of culinary business owners based on gender, age, and educational background:

Table 3. Characteristics of Respondents

No.	Characteristic	Information	Distribution	
			Frequency	Percentage
1.	Gender	Male	63	58
		Woman	45	42
		Sum	**108**	**100.00**
2.	Age	< 25 year	0	0
		26 - 35 year	40	37
		36 - 45 year	35	32
		46 - 55 year	20	19
		> 56 year	13	12
		Sum	**108**	**100.00**
3.	Education	Elementary	15	14
		Junior High School	22	20
		High School	31	29
		Associate Degree	14	13
		Bachelor (S1)	26	24
		Sum	**108**	**100.00**

Source: Questionnaire (Data Processed by Researcher, 2024)

Table 3 shows that most respondents (micro business actors) are managed by men, as many as 63 people or 58%. This shows the dominance of men as micro-business owners. In addition, the age of business owners is dominated by the age range of 26-35 years, which is 40 people or 37%, followed by 35 people or 32% of the age of 36-45 years. The lowest age group is over 56, 13 people or 12%. The data shows that the micro business respondents are dominated by their productive age and fall into the category of digital natives, where the person was born in the digital era, namely in the 1980s, and has no difficulties. Furthermore, these culinary business actors generally have a high school education background, as many as 31 respondents or 29%; this means that the respondents have an excellent educational background. Overall, the data on the characteristics of respondents based on gender, age, and educational background showed that the respondents from the culinary business actors were dominated by men with an age range that was still productive and had an excellent educational background. These characteristics are supporting factors in knowledge and ability about the use of information and communication technology to support business and marketing processes.

Outer Model Analysis

To analyze the data, we used the SmartPLS software version 3.2.9. The outer model analysis consists of outer loading and construct reliability and validity. To test construct reliability, we measured it using Cronbach's alpha and composite reliability. In the first step, we evaluate the outer model at the dimensional level. The latent variable values generated in the first step of testing are used for the second step, namely the evaluation of the outer model

at the variable level and the evaluation of the structural model. The procedure is based on the expert opinion of the disjoint two-stage approach method (Sarstedt et al., 2019). The second step is to measure the outer model at the variable level. The following are the results of the analysis of the outer model level variable in this study:

Table 4. Outer Loading, Construct Reliability and Validity

Variable	Items	Outer Loading	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Digital Capability	BDC	0.925	0.910	0.925	0.943	0.848
	SO	0.943				
	SVC	0.894				
Competitive Advantage	SMS	0.848	0.920	0.930	0.940	0.758
	IC	0.886				
	ER	0.851				
	PR	0.917				
	LA	0.848				
Firm survival	BR1	0.844	0.829	0.841	0.875	0.540
	BR2	0.736				
	BR3	0.737				
	BR4	0.728				
	BR5	0.682				
	BR6	0.669				

Table 4 shows that the outer loading value is more than 7 (green font) for as many as 12 items. Meanwhile, those below 0.7 (red font) are two items. A red font indicates a value that did not pass the test (invalid). However, according to Chin in Imam Ghozali, the outer loading value between 0.5-0.6 is sufficient to meet the convergent validity requirements (Ghazali & Latan, 2014). In the data, no indicators have an outer loading value below 0.5, so the indicator is declared feasible or valid. In addition, the recapitulation of the results of the outer model analysis shows that all criteria are met, so it can be concluded that the research data has good validity and reliability. Therefore, the research process can be continued to the next stage. This conclusion is based on the opinion of Chin (1998) and Ghozali (2014), which says that a variable is declared reliable if it has a Cronbach's alpha value above 0.60 and composite reliability above 0.70. Meanwhile, the average variance extracted (AVE) value adequate to measure validity is 0.50 (Ghazali & Latan, 2014).

Hypothesis Testing

Based on the proposed model, the hypothesis testing in this study is divided into two. First, test and analyze the direct effect of each variable. Second, test and analyze the mediating effect on the relationship between each variable by taking the value of Specific Indirect Effects. The hypothesis test results were carried out by looking at statistical t-values or p-values. Suppose the statistical t of the calculation results is more significant than 1.67 (t of the table), or the p-value of the test results is less than 0.05. In that case, there is a significant influence between the variables. The confidence level is 95% of the estimated path coefficient parameters. In addition, f square, sometimes called effect size, is used to determine the influence of direct variables on the structural level, with criteria of 0.02 low, 0.15 moderate, and 0.35 high) (Hair et al., 2019). The following is a table of hypothesis testing results for direct influence:

Table 5. Hypothesis Testing (Direct Effect)

Hypotheses	Path Coefficient	T Statistics (|O/STDEV|)	P Values	Confidence Intervals (95%)		f square
				(2,5%)	(97,5%)	
H1	0.761	23.030	**0.000**	0.699	0.822	**1.375**
H2	0.527	5.513	**0.000**	0.328	0.700	**0.272**
H3	0.273	2.603	**0.010**	0.068	0.465	0.073

Information:
H1 = X – Digital Capability -> Y – Competitive Advantage
H2 = X – Digital Capability -> Z – Firm survival
H3 = Y - Competitive Advantage -> Z - Firm survival
Source: Smart PLS Output (Data Processed by Researcher, 2024)

Based on Table 5 above, the highest path coefficient value is in hypothesis 1, 0.761. The lowest path coefficient value is in hypothesis 3, which is 0.273. The entire statistical t-value of the calculation results is more significant than 1.67 (t table), and the p-value of the test results is less than 0.05. Overall, the results of hypothesis testing in this study were accepted and had a positive and significant influence. As for the value of f square, the magnitude of the influence of digital capability on competitive advantage (hypothesis 1) is included in the "high" category. The "medium" category includes the magnitude of digital capability's influence on firm survival. Moreover, the magnitude of the influence of competitive advantage on firm survival is in the "low" category. The magnitude of the influence between the variables studied is also presented in the bootstrapping value model.

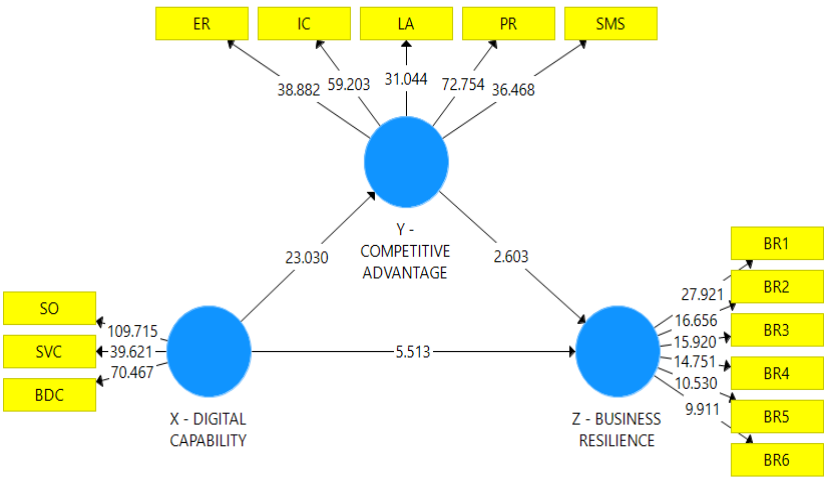

Figure 2. Model Test Results
Source: Smart-PLS Output, 2024

Furthermore, we test and analyze the mediating effect of competitive advantage on the relationship between digital capability and firm survival. The interpretation of the statistical value of f squared on the mediation effect is called the upsilon statistic (v), which is obtained by squaring the mediation coefficient by the criterion. The influence of mediation was low (0.02), medium mediation (0.075), and the influence of mediation was high (0.175) (Lachowicz et al., 2018). The following is a table of the results of testing the indirect effect on the structural model used:

Table 6. Specific Indirect Effects

No	Path Coefficient	T Statistics (|O/STDEV|)	P Values	Confidence Intervals (95%)		Upsilon (v)
				(2,5%)	(97,5%)	
1	0.208	2.529	**0.012**	0.052	0.363	$(0.761)^2$ x $(0.273)^2$ = **0.043**

Information:
X – Digital Capability -> Y – Competitive Advantage -> Z – Firm Survival
Source: Data Processed by Researchers (2024)

Based on table 5, the value of t statistic calculated is greater than 1.67 (t table) and the p-value of the test results is smaller than 0.05. With Thus it is stated that competitive advantage mediates the effect of digital capability on firm survival positively and significantly. capability on firm survival positively and significantly. In addition, the mediation effect, based on the calculation of upsilon (v) statistics, falls into the "low" category. into the "low" category. In other words, although the mediation effect significant effect, the structural level is low.

Discussion

The existence of MSMEs is crucial for the economic growth of a country. Given their significance, MSMEs must possess quality resources to enhance their performance (Kakilo et al., 2022). Among the critical resources for MSMEs, knowledge resources stand out as a key factor. In the context of micro-businesses, the ability of a firm to survive in the face of various crises and the demands of business competition hinges on its capacity to build and leverage these knowledge resources (Shinozaki, 2015; Cardoni et al., 2020). Knowledge, particularly when embedded in expensive and hard-to-imitate resources and capabilities, is a fundamental driver of superior performance (Makadok, 2001). Hypothesis 1 (H1) testing results in this study reveal a positive and significant influence between digital capability and competitive advantage. These findings align with the Resource-Based View (RBV) theory, which posits that companies must effectively utilize various internal resources, including human resources, to achieve and sustain business sustainability (Barney, 1991). In today's business environment, digital capabilities have become increasingly vital. Dethine et al. (2020) noted that "today's organizational resources have been greatly influenced by digital technology," compelling companies to develop more specific capabilities to address internal business challenges. The study's results underscore the importance of digital capabilities as a knowledge resource that enables companies to gain a competitive edge, adapt to changing market conditions, and ensure long-term survival in an increasingly competitive and digitalized market.

Digital capability is a critical knowledge resource that enables companies to excel in a competitive market and adapt to economic and natural changes. It is a critical asset that significantly enhances a company's ability to achieve a competitive advantage. This research demonstrates that digital capability is vital in increasing competitive advantage by allowing companies to respond effectively to evolving market conditions. The findings are consistent with previous studies, which have shown that digital capability contributes to improving operational efficiency, reducing costs, and securing a competitive edge in the marketplace (Nambisan et al., 2017; Vial, 2021). By integrating digital technologies into their operations, companies can streamline processes, enhance productivity, and maintain a competitive

position in an ever-changing business environment. This underscores the importance of digital capability as an essential resource for modern businesses, particularly in a rapidly digitalizing world where the ability to leverage technology is crucial for long-term success and sustainability.

The testing of hypothesis 2 (H2) reveals a positive and significant relationship between digital capability and firm survival, underscoring the critical role that digital capabilities play in sustaining businesses. This study's findings align with previous research, which has consistently shown that digital capability is closely linked to firm survival (Diandra & Syahputra, 2021). Digital capabilities create value for companies and contribute to their long-term sustainability. These capabilities emerge from integrating information and communication technology resources with corporate assets, managerial expertise, business strategies, and organizational synergies. In today's fast-paced business environment, technology has become a key source of competitive advantage while posing a threat to the survival of companies that fail to adapt. Multiple studies have indicated that business continuity is significantly influenced by a firm's information technology capabilities (Wilbon, 2015; Donkor et al., 2017; Erkmen et al., 2020). For MSMEs, compelling and successful digital transformation is crucial for ensuring their survival in the digital age (Casalino et al., 2020). These findings highlight the importance of digital capability as an essential factor in maintaining a company’s competitive position and ensuring its resilience in the face of challenges.

Hypothesis 3 (H3) testing confirms a positive and significant relationship between competitive advantage and firm survival, emphasizing the critical role that a robust competitive edge plays in ensuring a company's longevity. The findings of this study are consistent with previous research that has established a clear connection between competitive advantage and the ability of firms to survive in challenging market conditions (Naidoo, 2010). In today's intensely competitive business landscape, it is essential for companies not only to build but also sustain a competitive advantage if they are to thrive and succeed (Poi, 2023). Resilience in business requires overcoming various obstacles and developing multiple sources of competitive advantage to remain viable (Savino et al., 2017; Niemimaa et al., 2019). This is particularly evident among micro-businesses in Ciamis Regency, where a solid competitive advantage has significantly contributed to firm survival. By cultivating diverse strategies and leveraging unique strengths, these businesses can navigate the complexities of the market, ensuring their continued success.

Hypothesis 4 (H4) testing results indicate a positive and significant indirect effect of digital capability on firm survival through the mediation of competitive advantage. This finding reinforces the Resource-Based View (RBV) theory, which posits that a company can achieve and sustain a competitive advantage by effectively leveraging its internal resources, ultimately ensuring its long-term survival (Wernerfelt, 1984; J. Barney et al., 2001). The RBV framework emphasizes the importance of understanding how a firm’s unique resources and capabilities contribute to its competitive edge, influencing its profitability and sustainability. In this context, digital capability emerges as a critical resource that directly enhances competitive advantage and indirectly supports firm survival by strengthening that advantage. By harnessing digital resources, companies can build a competitive position that is difficult for competitors to replicate, thereby securing a sustainable future in a dynamic market. This

study's findings align with the broader principles of Resource Theory, which highlight the interconnectedness of resources, capabilities, competitive advantage, and long-term profitability. Understanding these relationships allows firms to strategically manage their resources to maintain and enhance their competitive advantage over time, ensuring continuous growth and survival in an increasingly competitive business environment.

One of the primary challenges facing microbusinesses in times of crisis is their inability to adapt, mainly due to a lack of resources and knowledge. This gap in capabilities is a significant weakness that hinders their survival. The knowledge and skills a business possesses are critical for enhancing its competitive advantage, which is essential for maintaining business continuity. In the context of the digital economy, more is needed for individuals to have basic digital literacy; they must also develop the advanced knowledge and skills necessary to effectively operate digital devices such as mobile phones, smartphones, and tablets. Additionally, they must be proficient in conducting digital financial transactions and safeguarding themselves as consumers in the digital market. Micro business actors in Ciamis Regency exemplify the importance of these skills. Their ability to operate digital devices has enabled them to remain competitive and resilient, allowing them to withstand various shocks—whether economic, natural, or epidemic-related. This highlights the critical role of digital literacy and capability in empowering micro businesses to navigate challenges and sustain their operations in a rapidly evolving digital landscape. For these businesses, continuous investment in building and enhancing digital skills is beneficial for long-term survival and success.

In this era of digital technology, the ability to use digital technology for business is mandatory and is one of the supporting factors for competitive advantages for companies (Uwizeyemungu et al., 2014, 2018). Digital competencies have been proven to increase competitive advantages in MSMEs in the food processing industry (Sari et al., 2020). The ability or knowledge possessed by the company is essential to increasing competitive advantage and maintaining business continuity. The experience of facing the COVID-19 outbreak proves that the role of information technology and the ability to use and utilize it is increasingly important. The findings of this study also support those of earlier research on the organization's resources, specifically its human, social, and financial capital. These three capitals are resources the organization uses to maintain its business (Danes et al., 2009). Physical and non-physical resources, including knowledge, are essential for companies to be competitive and have business continuity. This research has several limitations, one from the business locus, which only focuses on microbusiness in the Ciamis Regency. For further research, it is hoped that it can expand the research locus from several regions and add independent variables other than resources, such as entrepreneurial behavior.

Conclusions

Based on the research results, all hypotheses are acceptable and have a positive and significant influence. In other words, the survival of firms owned by microbusiness actors in the Ciamis Regency is influenced by resources in the form of digital capabilities and the competitive advantages they have. In addition, competitive advantage has a role in bridging digital capabilities against firm survival. We found that digital capabilities, rather than

business capabilities, influence firm survival more. Therefore, micro-business actors are advised to increase their knowledge and skill resources. Non-physical resources are critical assets in fierce business competition; for this reason, business actors need to increase their knowledge and skills through training and establish strategic partnerships to increase their competitive advantage and firm survival.

Reference

Alqershi, N., Ismail, A. I., Abualrejal, H., & Salahudin, S. N. (2020). Competitive advantage achievement through customer relationship management dimensions. Journal of Distribution Science, 18(11), 61–67.

Annarelli, A., Battistella, C., Nonino, F., Parida, V., & Pessot, E. (2021). Literature review on digitalization capabilities: Co-citation analysis of antecedents, conceptualization and consequences. Technological Forecasting and Social Change, 166(October 2020), 120635. https://doi.org/10.1016/j.techfore.2021.120635

Aryawati, N. P. A. (2020). Resiliensi Bisnis Pada UMKM Di Era Normal Baru Sebagai Upaya Kemandirian Ekonomi. Menyemai Benih Dharma Perspektif Multidisiplin, 47.

Barney, J. B. (1991). The resource based view of strategy: Origins, implications, and prospects. Journal of Management, 17(1), 97–211.

Barney, J., Wright, M., & Ketchen Jr, D. J. (2001). The resource-based view of the firm: Ten years after 1991. Journal of Management, 27(6), 625–641.

Berbegal-Mirabent, J., Ribeiro-Soriano, D. E., & GarcÝa, J. L. S. (2015). Can a magic recipe foster university spin-off creation? Journal of Business Research, 68(11), 2272–2278.

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital Business Strategy: Toward a Next Generation of Insights. MIS Quarterly, 37(2), 471–482. http://www.jstor.org/stable/43825919

Bi, R. (2011). an Integrative Model of E-Business Capability, Dynamic Capability, and E-Business Value for Fast Growth Small-To- Medium Enterprises (Issue August).

Cardoni, A., Zanin, F., Corazza, G., & Paradisi, A. (2020). Knowledge Management and Performance Measurement Systems for SMEs' Economic Sustainability. Sustainability, 12(7), 2594.

Casalino, N., Zuchowski, I., Labrinos, N., Nieto, Á. L. M., & Martín-Jiménez, J. A. (2020). Digital strategies and organizational performances of smes in the age of coronavirus: Balancing digital transformation with an effective business resilience. Law and Economics Yearly Review, 8, 347–380.

Cefis, E., & Marsili, O. (2006). Survivor: The role of innovation in firms' survival. Research Policy, 35(5), 626–641.

Correia, R. J., Dias, J. G., & Teixeira, M. S. (2020). Dynamic capabilities and competitive advantages as mediator variables between market orientation and business performance. Journal of Strategy and Management, 14(2), 187–206. https://doi.org/10.1108/JSMA-12-2019-0223

Dalimunthe, M. B. (2017). Keunggulan Bersaing Melalui Orientasi Pasar dan Inovasi Produk. JKBM (Jurnal Konsep Bisnis Dan Manajemen), 3(2), 140–153.

Danes, S. M., Lee, J., Amarapurkar, S., Stafford, K., Haynes, G., & Brewton, K. E. (2009).

Determinants of family business resilience after a natural disaster by gender of business owner. Journal of Developmental Entrepreneurship, 14(4), 333–354. https://doi.org/10.1142/S1084946709001351

Depkop. (2018). Perkembangan Data Usaha Mikro , Kecil , Menengah Dan Usaha Besar. Www.Depkop.Go.Id, 2000(1), 1.

Dethine, B., Enjolras, M., & Monticolo, D. (2020). Digitalization and SMEs' export management: Impacts on resources and capabilities. Technology Innovation Management Review, 10(4).

Diandra, D., & Syahputra, E. (2021). Covid-19 dan Strategi Bertahan Bisnis di Era Inovasi Digital: Dalam Perspektif Kapabilitas Digital Keunggulan Sumber Daya. Prosiding Industrial Research …, 4–5.

Donkor, J., Donkor, G. N. A., & Kankam-Kwarteng, C. (2017). Strategic planning and family business performance in Ghana: Moderating role of it capability. Academy of Entrepreneurship Journal, 23(2), 1–12.

Erkmen, T., Günsel, A., & Altindağ, E. (2020). The role of innovative climate in the relationship between sustainable IT capability and firm performance. Sustainability (Switzerland), 12(10). https://doi.org/10.3390/SU12104058

Ghazali, I., & Latan, H. (2014). SMART PLS. Undip Publishers. Semarang.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24.

Hakala, H. (2013). Entrepreneurial and learning orientation: effects on growth and profitability in the software sector. Baltic Journal of Management.

Hendry, L. C., Stevenson, M., MacBryde, J., Ball, P., Sayed, M., & Liu, L. (2019). Local food supply chain resilience to constitutional change: the Brexit effect. International Journal of Operations & Production Management, 39(3), 429–453.

Indarti, N., & Langenberg, M. (2004). Factors affecting business success among SMEs: Empirical evidences from Indonesia. Journal of Asia Entrepreneurship and Sustainability, 3(2), 1–14.

Kakilo, R., Hinelo, R., & Podungge, R. (2022). Pengaruh Kualitas Sumber Daya ManusiaTerhadap Peningkatan Kinerja UMKM Di Kota Gorontalo. YUME : Journal of Management, 5(3), 358–366. https://doi.org/10.37531/yume.vxix.347

Lachowicz, M. J., Preacher, K. J., & Kelley, K. (2018). A novel measure of effect size for mediation analysis. Psychological Methods, 23(2), 244.

Löfsten, H. (2016). Business and innovation resources: Determinants for the survival of new technology-based firms. Management Decision, 54(1), 88–106. https://doi.org/10.1108/MD-04-2015-0139

M'mbwanga, S. K., & Anyieni, A. (2022). Strategies Adopted to Achieve Competitive Advantage of Commercial Banks in Nakuru County, Kenya. International Journal of Scientific Research and Management (IJSRM), 10(04), 3278–3293.

Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. Strategic Management Journal, 22(5), 387–401.

Maulana, Y. S., Maulina, E., Kostini, N., & Herawati, T. (2022). Integration of Electronic Business on Tourism: A Bibliometric Network Analysis. Journal of Environmental Management & Tourism, 13(6), 1779–1797.

Melhem, S., & Jacobsen, A. H. (2021). A Global Study on Digital Capabilities. In World Bank Group (Vol. 1).

Mia, M. M., Zayed, N. M., Islam, K. M. A., Nitsenko, V., Matusevych, T., & Mordous, I. (2022). The Strategy of Factors Influencing Learning Satisfaction Explored by First and Second-Order Structural Equation Modeling (SEM). Inventions, 7(3). https://doi.org/10.3390/inventions7030059

Musonnafa, M. A., & Djazuli, A. (2022). The Effect of Customer Relationship Management on Marketing Performance Mediated by Competitive Advantage and Innovation (Study on Area Managers of Pharmaceutical Companies in East Java during the COVID-19 Pandemic). Asia Pacific Journal of Management and Education (APJME), 5(2), 111–121.

Nahuway, V. F., & Noermijati, R. (2018). Analysis of Cost Leadership Strategy and Differentiation Strategy in Creating Competitive Advantages and their Impact on Performance. International Journal of Science and Research BISSN (Online), 2319–7064.

Naidoo, V. (2010). Firm survival through a crisis: The influence of market orientation, marketing innovation and business strategy. Industrial Marketing Management, 39(8), 1311–1320. https://doi.org/10.1016/j.indmarman.2010.02.005

Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management. MIS Quarterly, 41(1), 223–238.

Niemimaa, M., Järveläinen, J., Heikkilä, M., & Heikkilä, J. (2019). Business continuity of business models: Evaluating the resilience of business models for contingencies. International Journal of Information Management, 49, 208–216.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. Strategic Management Journal, 14(3), 179–191. https://doi.org/10.1002/smj.4250140303

Poi, G. (2023). Entrepreneurial Self-Efficacy and Competitive Advantage of SMEs in Bayelsa State, Nigeria. International Journal of Entrepreneurship, 6(2), 30–46. https://doi.org/10.47672/ije.1519

Porter, M. E. (1989). How competitive forces shape strategy. In Readings in strategic management (pp. 133–143). Springer.

Rambing, P. R., Paendong, M. K., Kumaat, A. P., & Pessak, R. (2022). Implikasi Inovasi Produk Terhadap Keunggulan Bersaing Produk Bunga Segar Pada Umkm “Ilomata” Tomohon. Journal of Business Administration (JBA), 2(2), 108–122.

Reeves, M., & Whitaker, K. (2020). A guide to building a more resilient business. Harvard Business Review, 2–8.

Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. SmartPLS GmbH, Boenningstedt. Journal of Service Science and Management, 10(3), 32–49.

Royyana, A. (2021). Strategi transformasi digital pada pt. Kimia farma (persero) TBK. Journal of Information Systems for Public Health, 5(2), 15. https://doi.org/10.22146/jisph.34179

Sallatu, M. A., & Indarti, N. (2018). Determining Factors of Firm Survivability a Study of University Spin-Offs in Indonesia. Journal of Indonesian Economy and Business, 33(2), 143. https://doi.org/10.22146/jieb.30209

Sari, S. M., Yunizar, Y., & Sartika, D. (2020). Penentu Keunggulan Bersaing Pada UMKM: Apakah Kompetensi Digital dan Orientasi Kewirausahaan Penting? AdBispreneur: Jurnal Pemikiran Dan Penelitian Administrasi Bisnis Dan Kewirausahaan, 5(1), 63–72.

Sarstedt, M., Hair Jr, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. Australasian Marketing Journal, 27(3), 197–211.

Savino, T., Messeni Petruzzelli, A., & Albino, V. (2017). Search and recombination process to innovate: a review of the empirical evidence and a research agenda. International Journal of Management Reviews, 19(1), 54–75.

Shinozaki, S. (2015). A new regime of SME finance in emerging Asia: Enhancing access to growth capital and policy implications. In Foreign Direct Investment and Small and Medium Enterprises: Productivity and Access to Finance (pp. 77–104). World Scientific Publishing Co. https://doi.org/10.1142/9789814678810_0005

Tobi, H., & Kampen, J. K. (2018). Research design: the methodology for interdisciplinary research framework. Quality & Quantity, 52, 1209–1225.

Uwizeyemungu, S., Poba-Nzaou, P., Raymond, L., & St-Pierre, J. (2014). The combined effects of IT and HRM capabilities on competitive performance: Empirical evidence from service and manufacturing SMEs.

Uwizeyemungu, S., Raymond, L., Poba-nzaou, P., & St-, J. (2018). The complementarity of IT and HRM capabilities for competitive performance : a configurational analysis of manufacturing and industrial service SMEs performance : a con fi gurational analysis of manufacturing and. Enterprise Information Systems, 1–23. https://doi.org/10.1080/17517575.2018.1448118

Velu, C. (2015). Business model innovation and third-party alliance on the survival of new firms. Technovation, 35, 1–11.

Vial, G. (2021). Understanding digital transformation: A review and a research agenda. Managing Digital Transformation, 13–66.

Wahyuningtyas, R., Disastra, G., & Rismayani, R. (2023). Toward cooperative competitiveness for community development in Economic Society 5.0. Journal of Enterprising Communities: People and Places in the Global Economy, 17(3), 594–620.

Waithaka, P. (2020). Competitor Threats and the Competitive Advantage among Commercial Banks in Kenya. European Scientific Journal ESJ, 16(25), 72–87. https://doi.org/10.19044/esj.2020.v16n25p72

Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5(2), 171–180.

Wilbon, A. D. (2015). Technology strategy and organizational learning: Applying population ecology to understanding the influence on firm survival. Academy of Strategic Management Journal, 14(2), 221–236.

Xia, Y., Qiao, Z., & Xie, G. (2022). Corporate resilience to the COVID-19 pandemic: The role of digital finance. Pacific-Basin Finance Journal, 74, 101791