

# **The Effect of MSMEs Go-Online and Knowledge-Based Dynamic Capability towards MSMEs Resilience during COVID-19 Pandemic in Indonesia**

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## **Abstract**

Examining the impact of UMKM Go-Online and a knowledge-based dynamic capability on the adaptability of micro small medium enterprises (MSMEs) in Indonesia during the COVID-19 pandemic is the goal of this study. The pandemic has made it even harder for businesses to compete with one another due to pervasive social limitations. In fact, micro, small, and medium-sized businesses are some of the most significant factors driving Indonesia's economy. The government of Indonesia established the UMKM Go-Online program to assist micro, small, and medium-sized firms in relocating their operations online to circumvent this obstacle. However, not all actors in the MSMEs sector were familiar with using digital technologies. Through this study, quantitative research methods were employed, and a stratified random sample technique was used to collect data from 262 respondents in six Indonesian regions. SPSS and Smart PLS were applied for data analysis in this study. This research is limited since only 6 of 34 provinces in Indonesia were surveyed. MSMEs in Indonesia have established online operations using platforms such as Shopee, Tokopedia, Bukalapak, OLX, Blibli, and Google Business, according to the findings of this study. Grabfood, Gofood, Shopee Food, Traveloka Food, and Tokopedia are now the most popular online food markets in Indonesia. According to the results of the testing of the hypotheses, it shows that the impact of dynamic capability on digital transformation is the most significant, whereas the impact of knowledge resources on dynamic capacity is either small or may be ignored. When it comes to enhancing or developing an entrepreneur's ability to implement digital transformation for their business and ultimately create a resilient or agile business that can respond to the challenges of a dynamic and constantly shifting business environment, the dynamic capability variable is an important element.

**Keywords-**MSME, Go-Online, Knowledge-Based, COVID-19, Indonesia

## Introduction

There are some micro, small, and medium-sized entrepreneurs (MSMEs) who do not have sufficiently good competitiveness in Indonesia. Especially when they are facing the COVID-19 pandemic starting from the beginning of 2020. Around 30 million MSMEs went bankrupt, especially micro-businesses. Informal workers went home to their hometowns because many were bankrupt. Finally, there were 7 million informal MSME workers who lost their jobs (Indraini, 2021). The MSMEs that have gone bankrupt are mostly in the tourism sector due to the large-scale social restrictions (PSBB). According to the results of an ILO (International Labour Organization) survey of 571 MSMEs in Indonesia (2020), 90% of MSMEs had trouble with their cash flow, and 52% saw a loss of up to 50% of their regular income. 63% of MSMEs must tell workers to cease working. (ILO, 2020).

Due to widespread societal restrictions (PSBB) established during the COVID-19 pandemic period, MSMEs that wanted to survive started turning to online businesses to replace money earned offline. According to a survey done by Indonesian MSMEs in 2020, 8% of MSMEs continued to report increased turnover despite the pandemic. These SMEs have gone online or used online platforms to sell their products (Sugiarti, Sari, & Hadiyat, 2020).

The government has been working to help MSMEs over the past few years and the sector continues to expand. Total MSME numbers were 56,539,560 in 2012, and they increased to 57,900,787, or up 2.41%, in 2013. (Ministry of Cooperatives and Small and Medium Enterprises, 2014). A total of 59.2 million MSMEs were documented in 2017 (Yuliani, 2017). MSMEs made up 60% of Indonesia's GDP in 2019 and, by 2030, can contribute \$140 billion (Wibowo, 2020). This indicates that MSMEs are the backbone of the economy and have a significant impact on the economy of Indonesia.

Since 2015, a lot of education and training programs have been offered by the public and private sectors. There are online MSMEs training programs offered by at least seven ministries or institutions. Since MSMEs represent most sellers on the e-commerce platform, especially the marketplace, training is thought to be vital. As a result, business players need to be ready to change, especially in terms of technological literacy and digital marketing techniques (Kbc10, 2018). The main reason why MSMEs in Indonesia are hesitant to conduct business online is largely due to the perpetrators' lack of knowledge regarding how to do so. Google is optimistic that MSMEs are ready and are considering putting their business on an online platform (Ngazis, 2015).

In order to get 100,000 SMEs online and support them in expanding their market reach on a national and international level, the Ministries of Cooperatives and Small and Medium Enterprises and Communication and Informatics arranged a program simultaneously in 30 cities. A total of 25,000 employees received digital facilitator training. SMEs were given a domain ID and free hosting services if they met the conditions (Bhunias, 2017). The program commitment is to get 8 million MSMEs in 2020. This dedication shows the government's support for SMEs, which are one of the foundations of the Indonesian economy. It also launched 3.79 million MSMEs, which are already using online platforms to advertise their products (Viska, 2017). This figure represents approximately 8% of 59.2 million MSMEs in total (Yuliani, 2017). According to Rizkinaswara, (2018), a total of 4.914.413 MSMEs have Go-Online through onboarding their activities to the marketplace in 2018 (Bukalapak, Blibli.com, Tokopedia, Shopee, Blanja, and Grab Food). In 2020, 9.4 million of Indonesia's 60 million MSMEs went onto Go-Online (Pgh, 2020).

According to the description above, in this study the authors wanted to know the effect of Go-Online on MSMEs survival during covid-19 pandemic (PSBB) at the beginning of the second quarter of 2021 in point of view of their dynamic capability and digital transformation ability.

## **Theoretical Framework**

Canadian ecologist Holling first proposed the idea of "resilience" in 1973. (Bhamra, Dani, & Burnard, 2011; Burnard & Bhamra, 2011; Limnios, Mazzarol, Ghadouani, & Schilizzi, 2014), It refers to an ecosystem's capacity to respond to abrupt environmental changes and quickly return to its pre-change state. There are numerous additional, related definitions of business or MSME resilience in the academic and grey literature. What keeps coming through is that resilience includes both an organization's and an organization's ecosystem's capacity for shock adaptation and recovery (Gray & Dunn, 2020). From earlier research by Hansen and Hamilton (2011), who identified 4 (four) factors that distinguished growth in enterprises of small firms, we can infer factors that support MSME resiliency. These include the use of extensive private business networks, regulated growth ambition, a culture of innovation and adaptability, and opportunistic assessments of the environment (Sausser, Baldwin, Pourreza, Randall, & Nowicki, 2018). Doern (2016) examines the elements that make a small business more crisis-resistant and less vulnerable. Her research reveals that experience, a future-focused perspective, and having the right tools all helped small firms maintain their resilience during the 2011 London riots. These conclusions, however, came from case studies.

A government initiative in Indonesia called UMKM Go-Online sought to develop 8 million MSMEs into online marketplace by the year 2020. MSME businesses can expand their regional and international consumer bases by integrating their offline and online sales. Without opening a branch, online marketing tools can link MSMEs with their customers. MSMEs should be able to meet global issues such as innovation in goods and services, the advancement of technology and human resources, and the expansion of the marketing sector (Directorate-General-of-Informatics-Apps, 2018; Rizkinaswara, 2018).

The boosters of Go-Online are market growth, global broadband penetration, an increasingly sophisticated online shopping experience, and the growing in popularity of smartphones and other devices connected to the internet. Go-Online programs form are training and mentoring (Sugianti, Sari, & Hadiyat, 2020; Rizkinaswara, 2018; Kbc10, 2018).

These developments in information, computation, communication, and networking across digital technologies have opened new opportunities for business model innovation. (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013). The concepts of digitalization and digital business, which enable work to be carried out beyond boundaries of time, distance, and function, have emerged to the market as a result of the alignment of IT strategy and business strategy (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013) similar to the definition provided by Go-Online above, it defined digital technology and business characteristics.

Digitalization has been defined in various ways by numerous researchers. Digitalization, also known as digital transformation, is defined by Kaplan et al. (2004) as the modifications brought about by the integration of digital technology into all spheres of human civilization (Kaplan, Truex, Wastell, Wood-Harper, & DeGross, 2004). Wade (2015) asserts that platforms for creating shareable digital capabilities (cloud solutions & marketplaces applications), mobile tools & applications, social media tools & applications, and analytics

tools and applications (including "big data") are currently the technologies most significantly linked to digital transformation.

## **Digital Transformation and MSME Resilience**

According to earlier studies, digital transformation strengthened business resilience (Fitriasari, 2020). Business owners and employees are highly innovative, according to previous studies, and are motivated to pursue self-directed learning by using internet tips and guidelines to master digital transformation skills. Despite having to contend with shattered supply chains, disjointed internet connections, and limited financial resources, many of these small and medium-sized businesses (SMEs) managed to make a digital pivot (Stewart, et al., 2021). It implies that there was a connection between MSME resilience and digital transformation. Therefore, we came up with the following hypothesis:

**H<sub>1</sub>:** Digital transformation has a relation to MSME resilience.

## **Dynamic Capabilities and MSME Resilience**

The ability to constantly integrate and rearrange resources to acquire a competitive edge in a changing environment is the emphasis of dynamic capabilities (Teece, Pisano, & Shuen, 1997). While "capability" stresses the adaptation, integration, and reconfiguration of both internal and external organizational resources in response to the changing environment, the term "dynamic" refers to the ability to regenerate competencies that match with the changing environment (Teece et al., 1997). During the 2008 financial crisis, dynamic capability was positively correlated with organizational resilience (Fainshmidt, 2014). As a result, we came up with the following hypothesis:

**H<sub>2</sub>:** Dynamic capabilities have a positive impact on MSME resilience.

## **Learning Mechanisms and Dynamic Capabilities**

According to Teece et al. (1997), the ability to reorganize and change is an acquired organizational talent. The easier it is to do, the more frequently you practice, due to its route dependence on available resources (Eisenhardt & Martin, 2000). Inside the company, dynamic capabilities are viewed as complex routines (Teece et al., 1997; Eisenhardt and Martin, 2000). Because what a firm learns depends on the knowledge it already has, this route dependency is seen as a learning mechanism (Eisenhardt and Martin, 2000; Zahra et al., 2006). Mechanisms of learning drive the development of dynamic capabilities (Zott, 2003). According to Zott (2003), learning enhances a firm's dynamic capacities by expanding its internal experience, connections between information, and codification of knowledge. According to Eisenhardt and Martin (2000), learning mechanisms enhance dynamic abilities through practice, error, and experience. Evidence of a beneficial association between learning and dynamic capacities was offered by Chen et al. (2009). Therefore, we came up with the following statement:

**H<sub>3</sub>:** Learning mechanisms have a positive impact on dynamic capabilities.

## **Knowledge Resource and Learning Mechanisms**

Knowledge resources may be incorporated into routine tasks and organizational processes (Teece, 2000). Prior linked knowledge resources are required in order to gain new

knowledge resources (Cohen & Levinthal, 1990). So, gathering knowledge resources into a knowledge storage system could make learning easier (Cohen and Levinthal, 1990; Zollo and Winter, 2002; Easterby-Smith and Prieto, 2008). An organization may have numerous effective learning processes in addition to its various knowledge resources. Therefore, we came up with the following hypothesis:

**H<sub>4</sub>:** Knowledge resources have a positive impact on learning mechanisms.

## Knowledge Resources and Dynamic Capabilities

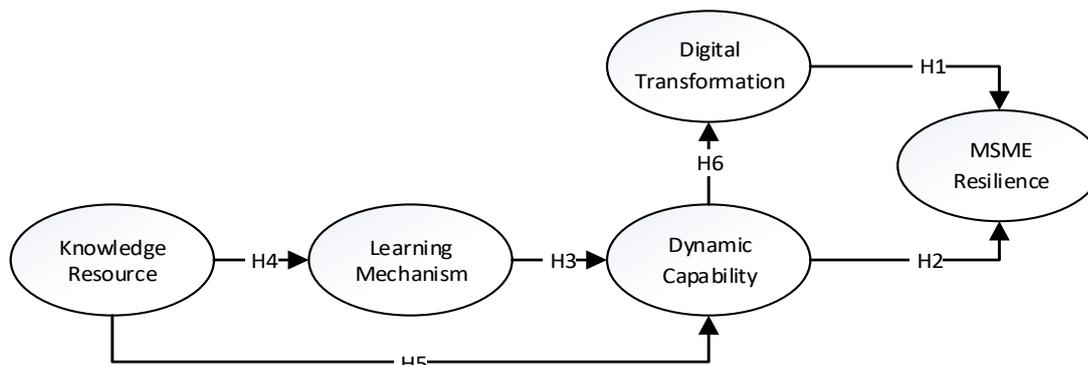
The relationship between knowledge resources and dynamic capacities has been looked at and supported by earlier research. Wu (2007) discovered that having a lot of resources can help an entrepreneur be more dynamic. Evidence of a beneficial association between resources and dynamic capacities was presented by Liao et al. in 2009. According to Griffith et al. (2006), knowledge resources may aid smaller shops in transforming them into dynamic capabilities. A company can generate more dynamic capabilities the more knowledge resources it has amassed. According to Chien and Tsai (2012a) learning process plays a key role in mediating the effect of knowledge resources on dynamic skills. Therefore, we came up with the following hypothesis:

**H<sub>5</sub>:** Besides their indirect effect by means of a learning mechanism, knowledge resources have a positive direct effect on dynamic capabilities.

## Dynamic Capability to Digital Transformation

Mendonça and Andrade (2018) used the dynamic capacities in the three micro-foundations proposed by Teece (2007) to examine the strength of the correlations by using the Spearman correlation test to correlations involving elements of the digital transformation (IoT, Big Data, and AI). They found only moderate correlations between the three technologies' performances in the Sensing dynamic capacity, which has procedures that enable the study of the internal and external surroundings. These weak performance correlations may be a result of the current underutilization of the technologies, specifically for this micro-foundation (Mendonça & Andrade, 2018). The previous study adds to the body of empirical research on dynamic capabilities and digital transformation by highlighting the crucial part that dynamic capabilities play in making that transition into a competitive advantage (Marx, de Paula, & Uebernickel, 2021). Therefore, we came up with the following hypothesis:

**H<sub>6</sub>:** Dynamic capabilities have a relation to digital transformation.



**Figure 1.** Conceptual Framework

## Research Methodology

### *Research Design and Sampling Design*

The behavior of 9 million Indonesian MSME owners was examined using stratified random sampling by researchers based on their unique dynamic capabilities and digital transformation in their company resiliency from stratified 33 provinces in Indonesia. First, we selected a sample of MSMEs owners from six provinces, totaling 262 respondents.

### *Research Instrument*

With the assistance of the Sahabat UMKM community, we conducted a simple random questionnaire survey of MSMEs owners in that region during the Destinasi Wisata Super Prioritas (DWSP) event, which was attended by Pak Jokowi, the president of Indonesia, and Pak Sandiaga Uno, the minister of tourism and creative economy. It was promised to the responders that none of their responses would be revealed.

The measurement of the research instrument is shown on Table 1.

**Table 1.** *Measurement of the Research*

Construct	Code	Items Factor	Instruments	Adapted from
Digital Transformation	A1	analytics tools and applications (including 'big data')	In my opinion, using Google Analytics for my business website analysis makes it easier to sell online.	Wade (2015)
	A2	mobile tools & applications	In my opinion, a cellphone with a stable internet package and its applications is required for my business to be able to sell online.	
	A3	platforms upon which to build shareable digital capabilities (like cloud solutions & marketplaces application)	In my opinion, my marketplace makes it simple to sell online.	
	A4	social media tools & applications	In my opinion, my social media helps me sell online.	
SME Resilience	B1	opportunistic perceptions of the environment	I see opportunities in the PSBB period and the application of digital transformation in business.	Hansen and Hamilton (2011); Sauser,
	B2	controlled growth ambition	I have control over the growth of business revenue and the implementation of digital transformation in the business during the PSBB period.	Baldwin, Pourreza, Randall, & Nowicki (2018)

Dynamic Capabilities	B3	a developed culture of innovation and flexibility	During the PSBB period and the implementation of digital transformation in business, my company developed an innovative and flexible culture.	
	B4	use of extensive private business networks	I expanded my network to facilitate business during the PSBB period and the implementation of digital transformation in business.	
	C1	absorbing knowledge resources	I like absorbing new information / information from the market / market.	
	C2	creating knowledge resources	I like making new discoveries from the information I've learned for business purposes.	Wang, Klein, & Jiang (2007); Chien, S.-Y., & Tsai, C.-H. (2012)
C3	storing knowledge resources	I like to save new discoveries and/or knowledge for later access or application.		
C4	applying knowledge resources	I like to apply new things I've learned to my business.		
Learning Mechanisms	D1	experience accumulation	The accumulation of my and others' experiences is the best teacher for business advancement.	
	D2	knowledge articulation	I like secretly converting (changing to another form) new knowledge so that it becomes clearer and more general through collective efforts.	Killen, C., Hunt, R. & Kleinschmidt, E. (2008); Chien, S.-Y., & Tsai, C.-H. (2012)
	D3	knowledge codification	I like to secretly create categories based on my perception and conceptualization of new knowledge so that it can be classified (tidily arranged) from various phenomena.	
Knowledge Resources	E1	Knowledge resources included customer-related and competitor-related	I am well-versed in how customers perceive the products and services offered by my company.	Griffith, D.A., Noble, S. and Chen, Q. (2006); Chien, S.-Y., & Tsai, C.-H. (2012)
	E2	knowledge resources.	I am well-versed in how customers perceive promotions for my company.	
	E3	Customer-related knowledge resources	I am well-versed in how customers / clients perceive my company's market segment.	
	E4	consisted of customer	I am well-versed in the promotions of my company's competitors.	

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	perceptions of the firm's products, promotions, and market segments toward the firm.	
E5	Competitor-related knowledge resources included the competitors' promotions, market segments and customers.	I am well-versed in the customers/customers of my business competitors.

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**Source:** *Data Analysis of this Study*

## Results

According to the results of questionnaires issued to 262 micro, small, medium, and large business actors (MSME), the majority of respondents were female (61%), while 39% of respondents were male. According to these statistics, the majority of MSME business players are female. Considering that just 28% of respondents are over 46 years old, it may be assumed that the majority of MSME firm owners are under 45 years old. Thus, SMEs are a viable alternative for young entrepreneurs to develop their businesses at this moment. The majority of respondents have at least a high school education, with 93% of respondents holding a bachelor's degree or more. This questionnaire was issued to MSMEs actors in major cities in Indonesia, including Bangka Belitung, Bali, Yogyakarta, Greater Jakarta, West Java, Central Java, Nusa Tenggara, Sulawesi, and Sumatra. Based on the type of company group that is operated, the largest is culinary, reaching 50%, followed by fashion and handicraft at 25%, services at 19%, and other businesses at 5%. 83% of respondents established this firm between 2011 and 2020, according to the data collected at the beginning of the business year, while only 1% started a business before 1990. According to the acquired statistics, the resilience of the MSME firm has become a major factor. The problems that develop, the obstacles encountered, are business disruptions such as the quality of raw materials, trouble selling online, a loss in income that can reach as high as 50 percent, and in the most extreme cases, the need to lay off staff or even temporarily cease operations. Another issue is the difficulty in managing financial issues, which makes it difficult for business players to pay business debts, so disrupting business continuity.

According to the research, 79% of these respondents already have a business website, indicating that the majority of these MSMEs are prepared to enter the digitalization era. This is made possible by the capacity of MSMEs to utilize social media. According to the statistics, it is known that all respondents are already utilizing WhatsApp to sell their products and services. In addition to WhatsApp, respondents commonly use Instagram, Facebook, Telegram, and YouTube as social media.

Respondents have also perceived and implemented the need to transition to digital media. The majority of respondents have sold their goods on online marketplaces including Shopee, Tokopedia, Bukalapak, Olx, Blibli, and Google Bisnis. Grabfood, Gofood, Shopee

Food, Traveloka Food, and Tokopedia are pillars of the culinary marketplace industry. As for services, MSME actors additionally utilize Tripadvisor, Expedia, Viator, and Traveloka, among others. According to the data, 52% of respondents already have a location connection on Google Maps, indicating that the awareness of the need to transition to digitization is very high. Obviously, this is a simple process for consumers who wish to learn the location of this SME.

**Table 2.** *Descriptive Data Analysis*

<b>Gender</b>	<b>Total</b>	<b>%</b>
Man	103	39%
Woman	159	61%
<b>Usia</b>		
<25	16	6%
25-35	77	29%
36-45	96	37%
46-55	63	24%
>55	10	4%
<b>Domicile</b>		
Bangka Belitung	11	4%
Bali	51	19%
DI Yogyakarta	24	9%
Jabodetabek	16	6%
West Java	7	3%
Central Java	66	25%
East Java	10	4%
Nusa Tenggara	40	15%
Sulawesi	3	1%
Sumatera	34	13%
<b>Education</b>		
Elementary School	2	1%
Junior High School	4	2%
Senior High School	112	43%
Undergraduate	132	50%
Masters	11	4%
Doctorate	1	0%
<b>Business Type</b>		
Handcraft & Clothing	66	25%
Culinary	131	50%
Service	51	19%
Etc.	14	5%
<b>Year Started the Business</b>		
<1990	2	1%
1991-2000	7	3%
2001-2010	29	11%
2011-2020	217	83%
>2020	7	3%
<b>Business Website</b>		
Available	206	79%
Not Available	56	21%
<b>Location on Google Map</b>		

Available	135	52%
Not Available	127	48%
<b>Total Business Assets (Excluding Land and Business Buildings)</b>		
<50 million	185	71%
50 – 500 million	72	27%
500 million – 1 billion	5	2%
<b>Total Business Income per Year</b>		
<300 million	237	90%
300 million – 2.5 billion	22	8%
2.5 – 50 billion	3	1%
<b>Business Income as the Main Family Income</b>		
Yes	191	73%
No	71	27%
<b>Total Employees</b>		
None	63	24%
1-5 persons	169	65%
6-10 persons	24	9%
> 10 persons	6	2%
<b>Year Start Online</b>		
<2005	1	0%
2006 – 2010	5	2%
2011 – 2015	22	8%
2016 – 2020	187	71%
>2020	47	18%
<b>Have been Exposed to COVID-19</b>		
Yes	63	24%
No	199	76%
<b>BLT 2020 Assistance of 2.4 million</b>		
Yes	87	33%
No	175	67%
<b>BLT 2021 assistance of 2.1 million</b>		
Yes	72	27%
No	190	73%

**Source:** *Data Analysis of this Study*

71% of respondents have business assets of less than 50 million rupiah, excluding land and buildings, whilst only 2% have business assets worth between 500 million and 1 billion rupiah. Based on annual business income, 90% of respondents have annual business incomes below 300 million rupiah. According to the questionnaire results, the MSME business is also a source of family income, constituting 73% of the family's primary source of income. Then, in terms of the number of employees, it shows that 24% of MSME businesses have no employees, while 65% have between 1 and 5 employees, indicating that MSME businesses are still of a small scale. Despite the fact that these businesses are still on a modest scale, the majority of respondents believe that selling their items online is a need, and according to the statistics, 89% of respondents have begun selling online since 2016. Intriguingly, 76% of respondent households have never been exposed to COVID, as revealed by these data. Regarding BLT support in 2020, which totaled Rp. 2,400,000.00, it was discovered that 67% of respondents did not receive the aid, and this percentage grew to 73% in 2021.

## Conclusion and Discussion

First, the outer model test is conducted based on the findings of data processing with SmartPLS Software. The validity of the items from this study is greater than 0.5, thus it can be stated that all questions evaluated are valid. According to table 3 below.

**Table 3.** *Validity Test*

	<b>Digital Transformation</b>	<b>Dynamic Capability</b>	<b>Knowledge Resources</b>	<b>Learning Mechanism</b>	<b>MSME Resilience</b>
A1	1.149				
A2	0.839				
A3	1.104				
A4	0.977				
B1					0.881
B2					1.111
B3					1.063
B4					0.977
C1		0.921			
C2		1.077			
C3		1.083			
C4		0.957			
D1				0.676	
D2				1.186	
D3				1.251	
E1			0.930		
E2			1.022		
E3			1.026		
E4			1.015		
E5			1.013		

**Source:** *Data Analysis of this Study*

Next is the Construct Reliability and Validity test, as determined by the Cronbach's Alpha value; the criteria must be more than 0.7 (Hair, Sarstedt, Ringle, & Jeannette, 2012). The Cronbach's Alpha values of these five variables are all more than 0.7, satisfying the criterion for concluding that all variables are reliable. In addition, Composite reliability testing based on the standards must be greater than 0.6. (Hair, Sarstedt, Ringle, & Jeannette (2012); Sarstedt, Ringle, & Hair, (2017)). The results of the composite reliability test for all variables in this study were all more than 0.6, satisfying the requirements, i.e., all variables demonstrated acceptable dependability. On the basis of these results, it may be inferred that there is internal consistency, meaning that if it is measured again with different respondents, consistent results will be obtained. From the results of Cronbach's Alpha and composite reliability, it is also determined that the minimum value for a satisfactory model unidimensional analysis is 0.7, therefore it can be stated that there is no issue with this measurement. In addition, the gauges of a construct should be highly correlated (Hair, Sarstedt, Ringle, & Jeannette, 2012), with the Average Variance Extracted (AVE) value being at least 0.5 (Wong, 2013); Sarstedt et al., 2017). Table 4's results indicate that all AVE values are more than 0.5,

indicating that the concept can explain at least 50% of the item's variance value, hence establishing convergent validity.

**Table 4.** *Construct Reliability and Validity*

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Digital Transformation	0.767	0.769	0.851	0.589
Dynamic Capability	0.901	0.904	0.931	0.771
Knowledge Resources	0.933	0.935	0.949	0.790
Learning Mechanism	0.740	0.752	0.854	0.664
MSME Resilience	0.872	0.879	0.913	0.723

**Source:** *Data Analysis of this Study*

In addition, the purpose of testing for discriminant validity is to evaluate whether a reflective indicator is an accurate measure of its construct. Each indicator must be substantially correlated with the construct only; the reference is to the value of the Fornell-Larcker criterion, where the construct is pronounced legitimate if the Fornell-Larcker criterion value is more than the correlation between latent variables. According to Table 5, the value of the Fornell-Larcker Criterion, which is the root of the AVE, is greater than the correlation between the latent variables, indicating discriminant validity.

**Table 5.** *Fornell-Larcker Criterion*

Variable	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
Digital Transformation	0.767				
Dynamic Capability	0.677	0.878			
Knowledge Resources	0.399	0.458	0.889		
Learning Mechanism	0.599	0.735	0.530	0.815	
MSME Resilience	0.563	0.579	0.407	0.566	0.850

**Source:** *Data Analysis of this Study*

Based on cross-loading, the structure has a higher correlation with the measurement item than other constructs where the expected cross loading value is  $> 0.7$ . Table 6 reveals that the cross-loading value indicates that the correlation of the construct with the measurement item is stronger than that of the other constructs, and that the cross-loading value is  $> 0.7$ , hence proving the confirmatory analysis approach.

**Table 6.** *Cross-Loading*

	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
A1	0.795	0.550	0.320	0.452	0.467
A2	0.808	0.587	0.282	0.501	0.366
A3	0.725	0.468	0.332	0.384	0.429
A4	0.738	0.470	0.294	0.501	0.466
B1	0.467	0.463	0.405	0.464	0.810
B2	0.407	0.445	0.383	0.447	0.845
B3	0.473	0.514	0.273	0.463	0.884
B4	0.551	0.536	0.334	0.542	0.861

C1	0.679	0.878	0.389	0.636	0.549
C2	0.562	0.901	0.415	0.618	0.532
C3	0.501	0.843	0.385	0.641	0.457
C4	0.623	0.888	0.419	0.686	0.490
D1	0.626	0.661	0.280	0.703	0.452
D2	0.351	0.506	0.480	0.839	0.410
D3	0.487	0.624	0.522	0.891	0.513
E1	0.364	0.448	0.854	0.469	0.393
E2	0.384	0.425	0.911	0.512	0.390
E3	0.335	0.379	0.918	0.454	0.358
E4	0.322	0.375	0.881	0.454	0.325
E5	0.363	0.400	0.878	0.460	0.337

**Source:** *Data Analysis of this Study*

In addition, the Heterotrait-Monotrait correlation ratio (HTMT) must be  $< 0.90$  to ensure discriminant validity. In accordance with the discriminant validity requirements, the HTMT value for this test is displayed in Table 7 where all findings fall below 0.90.

**Table 7.** *HTMT Value*

	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
Digital Transformation					
Dynamic Capability	0.809				
Knowledge Resources	0.472	0.497			
Learning Mechanism	0.798	0.899	0.632		
MSME Resilience	0.683	0.648	0.453	0.699	

**Source:** *Data Analysis of this Study*

Then, using collinearity statistics, where the limit is a correlation value greater than 0.9 or a maximum VIF value of 5. Table 8 demonstrates that the overall VIF value is less than 5, indicating that there is no association between the predictor variables. This test has no multicollinearity issues at the level of the indicator.

**Table 8.** *Collinearity Statistics (VIF)*

	VIF
A1	1.579
A2	1.678
A3	1.371
A4	1.400
B1	1.879
B2	2.273
B3	2.680
B4	2.255
C1	2.592
C2	3.078
C3	2.249
C4	2.677
D1	1.209

D2	2.085
D3	2.246
E1	3.219
E2	4.456
E3	4.586
E4	4.086
E5	3.371

**Source:** *Data Analysis of this Study*

After completing the outer test, the inner model is examined to determine how much influence occurs from each path, including both direct and indirect effects based on models constructed from exogenous latent variables on endogenous latent variables. The values of the conventional direct effects (path coefficient) range from -1 to 1. Table 9 below details the direct consequences of the five variables.

**Table 9.** *Indirect Effect*

	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
Digital Transformation					0.465
Dynamic Capability	0.579				0.461
Knowledge Resources		0.069		0.376	
Learning Mechanism		0.705			
MSME Resilience					

**Source:** *Data Analysis of this Study*

In addition to the direct effect, each variable also has an indirect influence, as shown in Table 10. This indirect effect is mediated by an intermediary variable.

**Table 10.** *Indirect Effect*

	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
Digital Transformation					
Dynamic Capability					0.269
Knowledge Resources	0.193	0.265			0.244
Learning Mechanism	0.408				0.515
MSME Resilience					

**Source:** *Data Analysis of this Study*

After determining the direct and indirect impacts, it is necessary to assess the total effect, which is the sum of the direct and indirect effects of each variable. The cumulative effect of all variables is shown in Table 11.

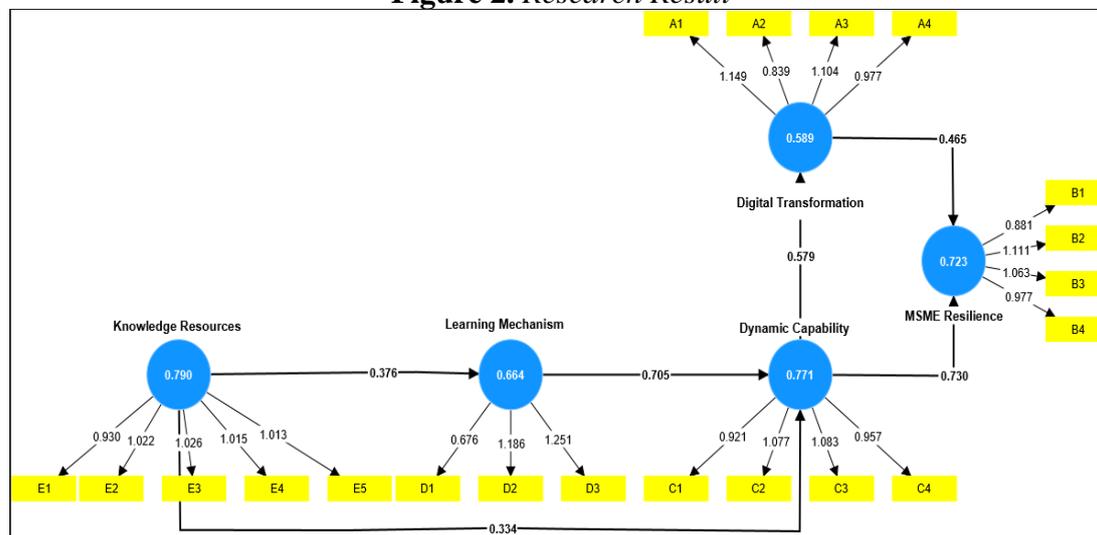
**Table 11.** *Total Effect*

	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
Digital Transformation					0.465
Dynamic Capability	0.579				0.730

Knowledge Resources	0.193	0.334	0.376	0.244
Learning Mechanism	0.408	0.705		0.515
MSME Resilience				

**Source:** Data Analysis of this Study

**Figure 2. Research Result**



**Source:** Data Analysis of this Study

To determine the effect of each variable, the F-Square value can be used, where F-square values less than 0.02 can be ignored or there is no effect, F-square values between 0.02 and 0.14 indicate a modest effect, and F-square values greater than 0.15 indicate a significant effect. Up to 0.35 has a moderate effect, whereas values beyond 0.35 have a significant impact (Sarstedt et al., 2017). According to Table 12, the greatest effect of dynamic capability on digital transformation is 0.848, whereas knowledge resources on dynamic capability have little effect or can be disregarded.

**Table 12. F-Square Value**

	Digital Transformation	Dynamic Capability	Knowledge Resources	Learning Mechanism	MSME Resilience
Digital Transformation					0.088
Dynamic Capability	0.848				0.118
Knowledge Resources		0.014		0.391	
Learning Mechanism		0.744			
MSME Resilience					

**Source:** Data Analysis of this Study

Additionally, to measure the magnitude of R-square's influence in order to establish the model's robustness. R-square describes the extent to which the exogenous variable can explain the endogenous variable. The R-square observed is the adjusted r-square, and based on Table 13, the highest R-square value for the dynamic capability variable, which has a moderate influence, indicates that this model's strength is fairly good. The variable with the smallest R-square value is the Learning Mechanism variable, which has a value of 0.278. This indicates that the variable that affects the learning mechanism variable accounts for only 27.8% of the variance, while the remaining 72.2% is influenced by variables not specified in this model.

**Table 13. R-Square Value**

	<b>R-square</b>	<b>R-square adjusted</b>
Digital Transformation	0.459	0.457
Dynamic Capability	0.547	0.543
Learning Mechanism	0.281	0.278
MSME Resilience	0.389	0.384

**Source:** *Data Analysis of this Study*

Furthermore, from the fit model, it can be seen from the RMS Theta value or Root Mean Square Theta < 0.102 or the SRMR (Standardized Root Mean Square) value < 0.10 or the NFI value > 0.9. Only one of these three requirements is adequate. In the fit model calculation, the saturated model value for SRMR is less than 0.10, which shows that this measurement model is fit, based on the data acquired from the study findings as shown in table 14.

**Table 14. Fit Model**

	<b>Saturated model</b>	<b>Estimated model</b>
SRMR	0.073	0.086
d_ULS	0.420	0.671
d_G	0.508	0.529
Chi-square	762.086	777.441
NFI	0.802	0.798

**Source:** *Data Analysis of this Study*

After verifying the model's fit, bootstrapping analysis using the basic approach is conducted to identify the relevance of each hypothesis. The findings of bootstrapping for all hypotheses in this investigation are provided below.

**Table 15. Bootstrapping Result**

	<b>Original sample (O)</b>	<b>Sample mean (M)</b>	<b>Standard deviation (STDEV)</b>	<b>T statistics (O/STDEV)</b>	<b>P values</b>
Digital Transformation -> MSME Resilience	0.465	0.475	0.104	4.477	0.000
Dynamic Capability -> Digital Transformation	0.579	0.573	0.069	8.326	0.000
Dynamic Capability -> MSME Resilience	0.461	0.464	0.089	5.189	0.000
Knowledge Resources -> Dynamic Capability	0.069	0.070	0.042	1.663	0.096
Knowledge Resources -> Learning Mechanism	0.376	0.377	0.053	7.058	0.000
Learning Mechanism -> Dynamic Capability	0.705	0.698	0.075	9.384	0.000

**Source:** *Data Analysis of this Study*

On the basis of these results, it can be stated that of the six study hypotheses, five are supported by data and one is not, namely the fifth hypothesis, which asserts that there is a relationship between knowledge resources and dynamic capability. Therefore, it may be stated that five hypotheses are valid.

**Table 16.** *Hypothesis Result*

	<b>Hypothesis</b>	<b>Status</b>	<b>Influence Scale</b>
1	Digital Transformation -> MSME Resilience	Accepted	0.465
2	Dynamic Capability -> Digital Transformation	Accepted	0.730
3	Learning Mechanism -> Dynamic Capability	Accepted	0.705
4	Knowledge Resources -> Learning Mechanism	Accepted	0.376
5	Knowledge Resources -> Dynamic Capability	<b>Rejected</b>	0.334
6	Dynamic Capability -> MSME Resilience	Accepted	0.579

**Source:** *Data Analysis of this Study*

Based on the results of the analysis, it can be concluded that all of them have a positive effect, with hypothesis 2 having the greatest influence, i.e. the relationship between dynamic capability and digital transformation, and hypothesis 4 having the least influence, that is the effect of knowledge resources on learning mechanisms.

Therefore, the conclusions from this study are:

1. According to the results of questionnaires sent to 262 micro, small, medium, and large business actors (MSME), most respondents are female.
2. The majority of MSME entrepreneurs are under 45 years old. Thus, SMB entrepreneurs are currently a viable alternative for young entrepreneurs seeking to expand their operations.
3. The majority of these micro, small, and medium-sized enterprises (MSMEs) are prepared to enter the digital era because they already have a business website. The majority of respondents have sold their items on marketplaces such as Shopee, Tokopedia, Bukalapak, OLX, Blibli, and Google Business, with GrabFood, GoFood, ShopeeFood, Traveloka Food, and Tokopedia being the most prominent culinary markets.
4. It was discovered that dynamic capability had the greatest impact on digital transformation, but knowledge resources on dynamic capability had no influence or could be disregarded.
5. The Learning Mechanism variable was found to have a low R-square value, indicating that the variables that influence the learning mechanism variable are tiny, with the majority of them being influenced by variables beyond the scope of this study.
6. From the six research hypotheses, it can be inferred that five are supported by the data and one is not, namely the fifth hypothesis, which asserts that knowledge resources and dynamic capability are related. Based on the results of the analysis, it can also be concluded that there is a positive effect, with hypothesis 2 having the greatest influence, i.e. the relationship between dynamic capability and digital transformation, and hypothesis 4 having the least influence, i.e. the influence of knowledge resources on learning mechanisms.
7. In addition, it is concluded that the dynamic capability variable is an important factor in building or developing the capacity of entrepreneurs to implement digital transformation for their businesses and, ultimately, to achieve a resilient or agile business that can respond to the challenges of a dynamic and ever-changing business environment.

## **Recommendations**

Based on the research findings and conclusions, this study proposes the following recommendations:

1. Digital technology can open numerous potentials for Indonesia's SMEs. Numerous digital platforms, including as Shopee, Tokopedia, Bukalapak, OLX, Blibli, Grab, Gojek, and Traveloka, can be used to enhance market coverage.
2. Dynamic capability in a firm can support in the digital transformation process and stimulate the use of digital technology to boost business performance, thus businesses must pay attention to it.
3. Dynamic capability can also assist businesses in continuously adapting to changes in the business industry. This results in a business culture that is dynamic and adaptable to numerous developments.

## **Research Implications**

This study investigates how the MSME Go-Online program has affected MSMEs' ability to conduct business in Indonesia. Like Kaplan et al. (2004), who define digitalization—also known as digital transformation—as the modifications brought about by the integration of digital technology into every facet of human civilization. It is also mentioned by Bharadwaj, El Sawy, Pavlou, and Venkatraman (2013), who claim that the synchronization of IT strategy and business strategy is necessary to introduce the concepts of digitalization and digital business to the market. These concepts enable work to be performed across barriers of time, space, and function, and they had a definition of digital technology/business feature similar to the Go-Online definition.

## **Managerial Implications**

The results of this study provide a great impetus for the government to continue the Go-Online program evenly for each province because of the importance of digital transformation for MSMEs. Nowadays the Go-Online program has transformed into a Go-Digital program of the Indonesia government. the government can cooperate with every university in every province to together with lecturers to develop the MSME community in the region in sustainable community development activities 30 million of MSMEs in all provinces have Go-Digital their businesses (Angelica, 2022).

## **Future Research**

We recommend to measure the level of success of MSME actors in implementing Go Digital in their business as well as the obstacles faced in participating in and absorbing training materials held by the government. The arrangement of the required training programs and the clustering of participants according to their digital literacy capabilities of MSME actors to achieve success through the Go Digital program is interesting to be researched further.

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