



# Identification of MSMEs Digital Economy Accessibility as Competitiveness Before and After Covid-19 in Gowa Regency

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**Abstract.** The acceleration of the digital economy occurs after Covid-19. The demand for different digital transactions experiences sharpens, encompassing demand for services, financial technology (fintech), e-commerce, and digital payment application before and when the Covid-19 pandemic existed. This study aims to identify the accessibility of the digital economy for the MSMEs sector. It gives guidelines for MSMEs and their relationship to strengthening their power competitiveness before and after Covid-19. This research was analyzed using primary data with a survey technique (questionnaire) from 150 samples of MSMEs in the Gowa district. Accelerating the digital economy in this study includes (1) knowing the concept, (2) having an application, and (3) being able to use application-related demand on services, financial technology, and e-commerce, as well as digital payments. Then the competitiveness in this study uses a proxy of MSMEs earnings before and after Covid-19 exists. The results show that respondents in the well-literate and literate categories understand the concept of demand on service by 75.33%, 91.34% for fintech, and 63.3% for e-commerce. Conversely, the MSMEs having the application shows a downward trend, especially fintech (47.33%) and e-commerce (46.67%). Meanwhile, at the user level, e-commerce also has the lowest percentage (26%) and demand for service (72%). The results also show that 22 units of MSMEs experienced increased turnover after the Covid-19 shock. Seven units of MSMEs are less literate, twelve are literate, and three are in the well-literate category.

**Keywords:** MSME's · Acceleration · Competitiveness · Literate · Digital Economy

## 1 Introduction

The digital economy's transformation has changed the Indonesian economy's face. Production and distribution activities no longer require a particular place, reducing production costs. The Covid-19 pandemic has become one of the drivers for the increase in the value of e-commerce in Indonesia. This is shown by the value of e-commerce which has increased significantly in 2021, namely IDR 401 trillion, and it is predicted that in 2022 it will increase to IDR 526 trillion or grow around 31.2% [2].

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Restrictions on community activities due to the pandemic have forced many business actors, especially in the MSME sector, to try to survive by continuing to produce and sell them online. In addition, public interest in using electronic money platforms and digital banking is also increasing. In 2021, BI recorded an electronic money transaction value of IDR 305.4 trillion, while digital banking was IDR 39,841.4 trillion. This value is predicted to grow by 17.13% and 24.83%, respectively, in 2022 [2].

Digital economy acceleration generally occurs in areas where economic growth centers have a relatively high level of financial literacy. Financial literacy is knowledge, skills, and beliefs that influence financial attitudes and behavior to improve the quality of decision-making and financial management to achieve financial inclusion (SNLIK, 2021). Thus, this encourages the financial welfare of society. Low financial literacy impacts individuals' losses either due to inflation, declining economic conditions both domestically, or the development of the economic system [2].

The importance of financial literacy for individuals is not just knowledge or theory. However, it is expected to make individuals wiser and more innovative in managing their assets to provide beneficial feedback in supporting individual finances both in the short and long term [15]. Furthermore, based on the 2019 SNLIK survey, the Makassar City financial literacy index is 38.54%. However, the index data based on regional strata includes Gowa Regency, which is 26.32%. The gap in these index values is quite large compared to the regional strata in Java and Sumatra.

The financial literacy index (ILK) based on strata in 2019 shows a significant gap between the percentages of ILK Makassar City (38.54%) and Gowa Regency (26.32%). This difference illustrates the inequality of understanding, knowledge, and information regarding access to finance, digital financial products, digital marketing, and a cashless society ecosystem. However, the shock caused by Covid-19 is still sufficiently controlled by Gowa Regency's economic activities, especially the rapid development of the MSME sector. Social restrictions make people continue to carry out economic activities by marketing through various digital platforms. This, of course, reduces production costs and provides additional income for MSME entrepreneurs.

Apart from that, from the payment side, Bank Indonesia has also encouraged using QRIS, which has many benefits, such as increased sales due to accepting QR-based payments, updates, and transparency of transaction recording. If MSME actors know this information well, MSME products will be more competitive. Then, the more comprehensive the product marketing network, the easier it is to buy and pay for products. This digital economic response allows MSME sector actors to choose investment instruments to strengthen their business competitiveness. It ultimately encourages an increase in income, reflecting an increase in the welfare of MSME sector actors and the welfare of the people of the Gowa Regency.

Today the digital economy has developed very rapidly. Four sectors are estimated to be in great demand in the post-Covid era, namely, the Education sector, where access is increasingly widespread thanks to online learning innovations. The Health sector continues to develop along with technological developments, the fintech sector, where digital lending and online investment are increasingly popular, and the e-sector -commerce, where the number of online buyers has skyrocketed in the pandemic era. It can be seen from the development of various forms of a digital economy based on demand

for service (Spotify, grab, indihome, gojek, NetFlix); (2) fintech in the form of innovation in the financial sector (Credito, Gopay, tanihub, ovo, kitabisa.com, taralite), and (3) E-commerce, namely the spread of online sales, purchases, marketing of goods and services. The accelerated development of the digital economy will likely encourage the strengthening of MSMEs in the Gowa Regency.

This study aims to identify the Accessibility of the Digital Economy of MSMEs as Competitiveness Before and After Covid-19 in Gowa Regency. In this region, there are 37,000 MSME units whose accessibility to the digital economy still needs to be identified because of Kab's financial literacy level. Gowa is still relatively low. Identifying digital financial access for MSME actors can provide guidelines to what extent economic acceleration can be accessed and how it affects the strengthening of MSME competitiveness.

## 2 Theory and Hypothetic Development

Competitiveness is associated with the ability of MSEs to produce goods and services that meet international standards. In this case, the competitiveness of one company creates a specific value with other companies. It is supported by Hitt et al. in Handriani (2011: 53), who argue that the competitiveness of small businesses is the extent to which a company can meet market demand, both domestically and internationally, by producing goods and services and maintaining or developing the business. And their employees. According to Ada et al. (2013), the competitiveness of MSEs can increase the selling value in commercial competition [1].

Competitiveness is associated with increasing the competitiveness of MSEs to survive in a constantly changing environment and intense business competition [10]. Meanwhile, according to Porter (1985: 102), *competitiveness* is defined as implementing strategies that create business value and are not achieved by competitors and competitors who are challenging to imitate [9]. Global competitiveness is associated with high levels of social learning and the ability to adapt to new technologies.

Many factors affect a company's competitiveness; these factors can come from within or outside the company. According to Handriani (2011), a company is said to be well competitive if it has a high-profit level even though the situation and industrial structure are unfavorable. Meanwhile, the competitiveness and weaknesses of SMEs in Indonesia are due to a lack of working capital, difficulties in marketing, access to financial resources, weak management and technological skills, low productivity, and limited production resources. Especially capital and technology., information and markets, institutions, and organizations for poor quality cooperation and lack of business networks [13]. In contrast, Vojtovic (2017) states that increasing competitiveness can include the transfer of innovation and new technologies, growth in labor productivity, introduction of innovative approaches to production, growth of added value, and investment in research and development [14].

A critical indicator in the development of MSMEs, which aims to increase their competitiveness, is the ability to adapt technological innovations in the digital economy context. The thing currently developing the most is the digitization of the financial sector. Because of the growing technological innovations in the financial sector, the community,

including MSME players, must increase financial literacy by studying and understanding every service, product, and financial decision they will implement. It is intended so that the benefits of access to finance, including fintech, can be felt to the fullest and not harm MSME actors. Financial literacy itself is a skill in financial terms that a person has. Someone with good financial literacy (well-lit) will be able to see money from a different perspective and control his financial condition [6]. The importance of financial literacy for MSME players so that technological innovation in the financial sector in the form of digitalization of the economy can accelerate the competitiveness of MSMEs.

Technological innovations in the financial sector are increasingly developing. The community, including MSME actors, must increase financial literacy by studying and understanding every service, product, and financial decision they will implement. It is intended so that the benefits of access to finance, including fintech, can be felt to the fullest and not harm MSME actors. Someone with good financial literacy (well-lit) will be able to see money from a different perspective and control his financial condition [7]. For MSMEs, understanding the concept of financial literacy is very important. Good financial literacy will make it easier for them to know how the value of money will be helpful in the present and how significant the impact will be in the future. Therefore, strategic efforts are needed to improve the performance and sustainability of MSMEs [3]. Increasing the financial knowledge of MSME actors will improve the performance and sustainability of MSMEs so that their management and accountability can be better accounted for as befits large companies [3]. Based on the National Financial Literacy Survey (SNLK) conducted by the Financial Services Authority (OJK) in 2019, the national financial literacy index is 38.03%, and the financial inclusion index is 76.19% [8].

The Industrial Revolution 4.0 raises opportunities and challenges, especially for Micro, Small, and Medium Enterprises (MSMEs). To be able to compete in existing business competition, MSMEs are required to be able to adapt to digital-based economic transformation. The success of MSMEs in surviving and winning the competition is determined mainly by their competitiveness [4]. The importance of digitizing MSMEs is to survive and win the existing competition by increasing the performance and competitiveness of MSMEs [11]. Digital-based business transformation needs to be carried out. It requires the support of two main factors: the high level of digital literacy and the high quality of products or services. Several strategies can be carried out: focusing on core competencies, mastering skills, customer-centric strategies, reducing production costs, and expanding market share to the international level [5].

The study of SMEs and E-commerce has received much attention from academics and practitioners because SMEs play an essential role in generating large amounts of state revenue at this time. Therefore, the contribution of SMEs to economic development despite their scarce resources requires intense and passionate studies to examine the factors that will affect the adoption of E-commerce among SMEs [12]. SMEs can overcome global challenges by conducting reliable, balanced, and high-standard business operations. There are various management methods to increase the competitiveness of SMEs. In recent years the competitiveness of SMEs has also been analyzed at the country level. Creating a good business environment for this group of companies is crucial. In times of crisis, the extraordinary role of SMEs in GDP creation is emphasized throughout Europe and abroad [7].

The main reason for addressing competitiveness at the SME level is that, in the end, macro-level competitiveness is generated at the enterprise level, the leading actor of economic life. It is one of the most widely used levels of analysis in the literature due to the particular interest shown by companies in assessing their competitive situation concerning direct competitors, using easy-to-use tools for comparison between firms (benchmarking is one of the most widely used systems). Used), specificity of comparison, using quantitative indicators that are widely accepted and easy to compare - profit, market share, Etc. (Ceptureanu, S, 2015).

### 3 Methodology

This research was analyzed using primary data with a survey technique (questionnaire) from 150 samples of MSMEs in the Gowa district. Accelerating the digital economy in this study includes (1) knowing the concept, (2) having an application, and (3) being able to use application-related demand on services, financial technology, and e-commerce, as well as digital payments. Then the competitiveness in this study uses a proxy of MSMEs earnings before and after Covid-19 exists.

### 4 Result and Discussion

Identification of digital economic access for MSMEs in Gowa Regency as measured by the level of financial literacy based on On-Demand Service (ODS), Fintech, Understanding of E-Commerce, Implementation of Digital Finance in MSMEs. The identification results with various measurement indicators are stated in an index. The resulting index is one of this era's power benchmarks for MSMEs. Digitalization in all sectors, including MSMEs, is critical to implement as a competitiveness for MSMEs in increasing their turnover and profits (Table 1).

Based on the table above, MSMEs in Gowa Regency fall into the category of quite understanding. Gowa Regency. Regarding ownership and use of applications, it still shows that some MSMEs are not literate. This condition tends to explain that the behavior

**Table 1.** Percentage of the Number of MSMEs based On-Demand service Literacy

No	“On Demand Service” Literacy	Number of MSMEs (%)			
		<i>Very Understand</i>	<i>Adequately Understand</i>	<i>Less Understand</i>	<i>Do Not Understand</i>
1	Understanding Concepts	21,33%	67,33%	11,33%	0,00%
2	Application Ownership	11,33%	65,33%	16,67%	6,67%
3	Application Usage	8,00%	64,00%	21,33%	6,67%

Source: Primary Data, Processed (2022)

of MSMEs still needs time to fully transform into the digital sector, especially on-demand service applications (Table 2).

The literacy level of MSMEs towards financial technology (fintech) in general shows that 55.33% of the total respondents have mastered the concept of fintech, while 47.3% own applications, and 52.67% use applications. This description explains that it is possible that some respondents do not yet have the application but sometimes use other people’s applications to carry out digital economic transactions/activities. This survey also shows that less than 15% of MSMEs are less literate. Meanwhile, the number of MSMEs that needed help understanding the ownership of the application and the use of the application was 11.33% and 64.67%, respectively. It reflects the condition of MSMEs that still need to understand and utilize various financial technology (fintech) facilities, especially regarding funding, donations, and financial planning. Varian (2017) explains that technology is a part that can move the production curve. It means that adopting financial technology can increase efficiency, reduce production costs, and optimize the income of a business.

Table 3 shows that only 6% of MSMEs have qualified knowledge and understanding of e-commerce. Of these, only 2% have e-commerce applications, decreasing as much as 1.33% at the user level. On the other hand, the number of MSMEs that are not literate

**Table. 2** Percentage of Number of MSMEs based on Financial Technology Literacy

No	“Fintech” Literacy	% Number of MSMEs			
		<i>Very Understand</i>	<i>Adequately Understand</i>	<i>Less Understand</i>	<i>Do Not Understand</i>
1	Understanding Concepts	14,67%	55,33%	28,00%	2,00%
2	Application Ownership	0,00%	47,33%	41,33%	11,33%
3	Application Usage	0,00%	15,33%	20,00%	64,67%

Source: Primary Data, Processed (2022)

**Table. 3** Percentage of Number of MSMEs Based on E-Commerce Literacy

No	e-commerce Literacy	% number of MSMEs to “e-commerce”			
		<i>Very Understand</i>	<i>Adequately Understand</i>	<i>Less Understand</i>	<i>Do Not Understand</i>
1	Understanding Concepts	6,00%	52,67%	29,33%	12,00%
2	Application Ownership	2,00%	42,67%	41,33%	14,00%
3	Application Usage	1,33%	24,00%	35,33%	39,33%

Source: Primary Data, Processed (2022)

**Table 4.** Implementation of Digital Finance in MSMEs Sector

No	Category	Percentage of MSMEs “Digital Finance” Literacy			
		Very Understand	Adequately Understand	Less Understand	Do Not Understand
1	Digital Payment knowledge in business	38,00%	42,67%	16,00%	3,33%
2	Use of Digital payments in Business	18,00%	54,67%	24,00%	3,33%

Source: Primary Data, Processed (2022)

and less literate conceptually is 12% and 29.33%. This condition shows that MSMEs need to be appropriately touched by digital technology. Due to the lack of understanding of the concept, it is followed by a lack of ownership of the application, and of course, they will not use the application. Underdevelopment of financial technology can hinder the MSME sector from distributing and marketing its products [5].

Table 4 shows that 38% of respondents know the concept of digital payments in business very well. However, implementation in business is only 18%. Once again, conceptual understanding has not gone hand in hand with the decisions of MSME actors who have yet used digital payments in their business. While the number of respondents who quite understand as much as 42.67% and 54.67% of respondents have used it in business. It means that some respondents understand the concept but try to adopt or try their luck in business. However, understanding the concept should make use of digital transactions carried out effectively and efficiently. Furthermore, performance affects the sustainability of SME businesses. This research implies that support from the government is still needed so that MSMEs can take advantage of e-commerce and expand business networks to survive the Covid-19 pandemic [4].

A critical indicator in the development of MSMEs, which aims to increase their competitiveness, is the ability to adapt technological innovations in the digital economy context. The thing currently developing the most is the digitization of the financial sector. Because of the growing technological innovations in the financial sector, the community, including MSME players, must increase financial literacy by studying and understanding every service, product, and financial decision they will implement. It is intended so that the benefits of access to finance, including fintech, can be felt to the fullest and not harm MSME actors. Financial literacy itself is a skill in financial terms that a person has. Someone with good financial literacy (well-lit) will be able to see money from a different perspective and control his financial condition [5]. The importance of financial literacy for MSME actors so that technological innovation in the financial sector in the form of digitalization of the economy can accelerate the competitiveness of MSMEs (Table 5).

However, what needs to be considered is the existence of MSME units that can still produce and produce goods/services during Covid-19. It proves that an increase in the

**Table 5.** Overview of Turnover Conditions Before-During Covid -19

Turnover Difference Pre-During Covid 19	MSMEs Frequency	Percentage
Increasing	22	14,7%
Constant	42	28,0%
Decreasing	86	57,3%
Total	150	100%

Source: Primary Data, Processed (2022)

financial literacy index has made the MSME sector competitive to survive amid major economic shocks [15]. The encouragement of accelerating financial literacy can sustainably increase MSMEs’ competitiveness and performance due to the urgency to carry out digital economic transformation [10]. Therefore, it takes total effort and encouragement from the regional government of Gowa Regency to continue to increase financial literacy in the area, especially the MSME sector. The use of digital marketing has been carried out to increase customer awareness. Marketplace as a form of e-commerce is used as an innovation or change in sales methods [16].

As an economic foundation, the MSME sector has a significant role in maintaining economic resilience. When a shock occurs, the MSME sector becomes the leading supporter of the national economy [6]. Therefore, increasing financial literacy requires an acceleration to provide business opportunities and increase production. The importance of financial literacy for MSME actors so that technological innovation in the financial sector takes the form of digitization.

## 5 Conclusion

Identification of digital economic access for MSMEs in the concept of On Demand Service, in general, MSME actors understand enough in understanding the concept of owning applications and using applications during the Covid-19 pandemic. Before Covid, the percentage of lack of understanding of these indicators was relatively high. The percentage of MSMEs in Fintech literacy that is measured is based on an understanding of the concept, application ownership, and application use is at the level of sufficient understanding; it is just that application use has decreased during Covid-19 because only a few have applied it. Identification based on literacy in e-commerce before and during the pandemic shows that the level of understanding, application ownership, and application use is still in the less literate category. Furthermore, the implementation of Digital Finance shows that 50 percent of MSMEs have applied and experienced an increase during the Covid-19 pandemic.

Competitiveness in this study uses MSME income proxies before and after Covid-19. The results showed that respondents in the well-literate and literate categories understood the concept of demand on service by 75.33%, fintech by 91.34%, and e-commerce by 63.3%. In contrast, MSMEs with applications show a downward trend, especially fintech (47.33%) and e-commerce (46.67%). Meanwhile, at the user level, e-commerce also has



the lowest percentage (26%) and service requests (72%). The results also show that 22 MSME units experienced an increase in turnover after the Covid-19 shock. Seven MSME units are less literate, twelve literacy units and three are in the category of good literacy. Accelerating the digital economy during a pandemic, several MSMEs still have potential.

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