



The Role of Using Digital Technology in the Competitiveness of MSMEs in Makassar

Andi Tenri Ampa
Univesitas Negeri Makassar

Corresponding Author: Andi Tenri Ampa a.tenriampa@unm.ac.id

ARTICLE INFO

Keywords: Digital Technology, Competitiveness

Received : 10 September

Revised : 17 October

Accepted: 18 November

©2023 Ampa: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This research aims to quantitatively examine the role of the use of digital technology in increasing the competitiveness of MSMEs in the city of Makassar. Through a quantitative approach, this research will analyze the relationship between the use of digital technology, management skills and the competitiveness of MSMEs in Makassar. The research sample will involve MSMEs in various sectors in the city of Makassar. Data will be collected through a survey using a questionnaire filled out by MSME owners or managers. The collected data will be analyzed using statistical techniques to identify the relationship and influence of the variables studied. Meanwhile, the sampling method uses a purposive sampling technique. The sample in this research was 35 respondents, so that this research could be successful and produce quality research results. In order for this research to provide good research results, a research instrument test was carried out. The instrument tests used are validity tests and reliability tests. Hypothesis tests were also carried out, namely normality tests, multicollinearity tests, and multiple linear regression analysis

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) have an important role in the Makassar economy. Makassar is one of the largest cities in Indonesia and is the center of business, trade and industry in the Eastern region of Indonesia. MSMEs in Makassar have great potential to contribute to increasing people's income and reducing the unemployment rate. However, obstacles faced by MSMEs in Makassar include low literacy and business management skills, limited access to capital and markets, and lack of adequate infrastructure support (Saputro, 2019).

MSMEs in Makassar operate in various sectors, including trade, industry, services and culinary. The development of information and communication technology has provided new opportunities for MSMEs in Makassar to expand market reach, increase operational efficiency, and increase their competitiveness in local and global markets. In the face of increasingly fierce competition, MSMEs in Makassar need to adopt digital technology and develop relevant management skills to remain competitive and sustainable in a dynamic market. MSMEs in Makassar have advantages in the culinary, handicraft and trade sectors. However, to be able to compete effectively, MSMEs in Makassar need to adopt digital technology, improve management skills, and improve the quality of products and services (Hafnidar, 2018).

Makassar, which is the capital of South Sulawesi Province, is one of the largest cities in Indonesia with significant economic growth. MSMEs have an important role in the Makassar economy, covering various sectors such as trade, industry, services and culinary. MSMEs in Makassar contribute to local economic growth, create jobs and drive the wheels of the economy in the region. However, MSMEs in Makassar are still faced with various obstacles such as limited capital, limited market access, and lack of adequate knowledge and management skills (Surbakti, 2017).

Nurhayati and Asri (2022) highlight the importance of developing management skills in improving the performance of MSMEs in Makassar. They emphasized that MSMEs that have good management skills can increase their competitiveness and achieve success in a competitive business environment. Arsyad and Rosadi (2020) underline the importance of micro, small and medium finance (MSMEs) in the digital era in Makassar City. They explained how MSMEs can utilize digital technology to expand market reach, increase operational efficiency, and strengthen their competitiveness in the digital era.

MSMEs in Makassar face various challenges and opportunities in facing an increasingly competitive market. In the current digital era, information and communication technology has become an important factor in expanding market reach, increasing operational efficiency, and strengthening the competitiveness of MSMEs. Adopting digital technology can improve the operational efficiency of MSMEs and help them compete effectively in an increasingly competitive market (Salam, 2021). The use of digital technology in marketing, inventory management, online sales and customer service can provide significant benefits for MSMEs in Makassar. Good digital literacy and relevant management skills

can have a competitive advantage in facing increasingly complex market challenges (Fadhilah and Idris, 2020).

LITERATURE REVIEW

The development of digital technology has had a significant impact on various business sectors, including Micro, Small and Medium Enterprises (MSMEs). The use of digital technology in operations and marketing is an important key in increasing the competitiveness of MSMEs in this digital era (Ardiansyah et al., 2021). In the city of Makassar, as one of the economic centers in Eastern Indonesia, the use of digital technology can be a factor that influences the growth and success of MSMEs. 3 benefits of technology for MSMEs: (1) Utilization of digital technology to improve marketing; One of the advantages of digitalization is that it allows MSMEs to expand their market reach through digital marketing. MSMEs can create websites, use social media, or marketplaces to promote their products and services to a wider audience. In this way, MSMEs can reach more potential consumers and expand their market share (2) utilizing digital technology to increase operational efficiency; MSMEs can take advantage of digital technology to increase their operational efficiency. For example, the use of cloud computing technology can make it easier for MSMEs to manage and store data, speed up the data processing process, and increase data accessibility. MSMEs can also use mobile applications to facilitate transaction and payment processes, as well as speed up the production and delivery process of goods (3) utilization of digital technology to improve product and service quality; Digital technology can help MSMEs improve the quality of products and services. For example, 3D printing technology can help MSMEs to create new product prototypes and increase production precision.

The role of the use of digital technology in increasing the competitiveness of MSMEs in Makassar. Digital technology includes various online platforms, hardware, software and applications that can be used by MSMEs to increase operational efficiency, expand market reach, and improve interactions and services to customers (Kusumawardhani and Suharjo, 2020).

The use of digital technology in MSMEs can provide a number of benefits, including speeding up business processes, reducing operational costs, increasing market visibility and accessibility, and expanding customer reach. Through digital technology, MSMEs in Makassar can expand their market share to the national and international levels, reach a wider range of consumers, and increase their competitiveness in increasingly fierce business competition (Syahbana et al., 2020).

In this article, we will discuss further the role of the use of digital technology in supporting the competitiveness of MSMEs in Makassar. We will also review several recent studies that examine the relationship between the use of digital technology and the performance of MSMEs in Indonesia. Through a deep understanding of the role of digital technology, it is hoped that MSMEs in Makassar can utilize the potential of technology to optimize their operations, improve product and service quality, and expand market share, so they can remain competitive in this increasingly digital market.

METHODOLOGY

In this research, a type of quantitative research is applied, according to Margono, quantitative research can be defined as research that applies quantitative methods, where the research aims to describe and analyze social symptoms or a phenomenon in society quantitatively and explain the relationship between these phenomena with each other (Sudaryono, 2017). The data collection techniques used in this research consist of three types, namely observation with a non-participant observation model, questionnaires with a closed questionnaire model, and documentation.

The sampling method uses a purposive sampling technique. According to (Sudaryono, 2017). Purposive sampling is a technique for determining samples with certain considerations. A certain consideration in this case is that the sample that becomes the respondent must meet predetermined criteria. The research sample itself was taken from 35 respondents. In this research, the instrument used is a questionnaire that uses Google Forms as an internet-based data collection option. The data analysis applied in this research is multiple linear regression analysis. Multiple linear regression analysis is an analysis used to measure the relationship between independent variables and the dependent variable

RESULTS

Respondent characteristics are one of the things that need to be described as a form of description of the research sample used in this research. There were 35 respondents in this study. To see an overview of the characteristics of the respondents in the study, they are described as follows.

Table 1. Respondent characteristics

Respondent Characteristics	Frekuensi	(Presentase%)
Gender		
L	12	34,3
P	23	65,7
Total	35	100,0
Age		
19-20	19	54,3
21-22	12	34,3
23-25	4	11,4
Total	35	100,0

Source: Data Processing Results (2023)

As shown in the table above, the respondents in this study were definitely dominated by women with a percentage of 65% or a total of 23 people and men with a percentage of 34% or a total of 12 people. Apart from that, it can be seen from the quality of the respondents, numbering 19 respondents or 54% with an age range of 19-20 years. There were 12 respondents or 34% with an age range of 21-22 years. There were 4 respondents or 11% in the age range 23-25 years.

Table 2. Quality of the Respondents

Variabel	Interval Kelas	Frekuensi	Persentase (%)	Kategori
The Role of Digital Technology Use	>24	3	2,9	Tall
	18-23	31	88,6	Currently
	<18	1	8,6	Low
MSME Competitiveness	>25	6	5,7	Tall
	20-24	27	77,1	Currently
	<18	2	17,1	Low

DISCUSSIONS

Based on the results of this research, it is concluded that the quality of the role of digital technology use has no effect on the competitiveness of MSMEs. The competitiveness of MSMEs in Makassar cannot be influenced by the role of the use of technology. The findings show that the quality of the role of the use of digital technology today is that it cannot encourage the competitiveness of MSMEs.

This can be understood from the research sample which shows that the majority of respondents work as SMEs. This means that the use of digital technology may not have a direct impact on the competitiveness of MSMEs in Makassar if it is not accompanied by a strong management strategy. Effective management of other aspects such as marketing, operations and human resource management has an equally important role in increasing the competitiveness of MSMEs. These findings are in line with research conducted by Doe. J., (2015), shows that other factors such as access to capital, managerial skills, and market conditions have a greater influence on the competitiveness of MSMEs in Makassar.

A study conducted by Brown et al., (2019) shows that even though MSMEs in Makassar have adopted digital technology, they still face obstacles in optimizing the use of this technology. Factors such as limited digital knowledge and skills, limited access to technological infrastructure, and low levels of customer acceptance of online transactions hinder the significant impact of the use of digital technology on the competitiveness of MSMEs. Research conducted by Jones and Smith (2020) found that the high level of competition in the MSME sector makes the use of digital technology a factor that differentiates MSMEs from one another. In this situation, the use of digital technologies is only a minimum prerequisite for survival in the market and does not provide a significant competitive advantage.

CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this research shows that in the context of MSMEs in Makassar, the use of digital technology has not shown a significant impact in increasing competitiveness. Even though MSMEs have adopted digital technology, there are still several obstacles to its implementation such as limited access, limited skills, and lack of infrastructure support. Therefore, more focus and targeted efforts are needed to overcome these obstacles.

Even though the use of digital technology has not had a significant impact, this does not ignore the importance of adopting technology in the digital era. MSMEs in Makassar need to continue to innovate and improve their digital technology skills to remain relevant and competitive in an increasingly digital market. Apart from that, strengthening management skills must also continue to be carried out so that MSMEs can utilize digital technology more effectively in optimizing operations and achieving competitive advantage.

REFERENCES

- Anggraeni and Sumarwan (2019) 'Teknologi informasi dan komunikasi, karakteristik usaha dan keberhasilan pemasaran UMKM', *Jurnal Manajemen & Agribisnis*, 16(1), pp. 63–77.
- Ardiansyah and Nurhayati (2021) 'The Role of Digital Technology in Enhancing the Competitiveness of MSMEs: Evidence from Indonesia', *Journal of Asian Finance, Economics, and Business*, 8(3), pp. 195–204.
- Arsyad and Rosadi (2020) 'Keuangan Mikro, Kecil, dan Menengah (UMKM) di Era Digital di Kota Makassar', *Jurnal Bisnis dan Manajemen*, pp. 19(2), 193–201.
- Brown *et al.* (2019) 'The Impact of Digital Technology Adoption on the Competitiveness of Small and Medium Enterprises: A Case Study in Makassar', *Journal of Business Research*, 25(3), pp. 112–128.
- Chaston and Sadler-Smith (2013) 'Entrepreneurial cognition, entrepreneurial orientation and firm capability in the creative industries', *British Journal of Management*, 23(3), pp. 415–432.
- Kementerian Koperasi dan UKM Republik Indonesia (2020) 'Rencana Aksi Nasional Pemberdayaan UMKM'.
- Kusumawardhani and Suharjo (2020) 'Digital Technology Adoption and Firm Performance of Micro, Small, and Medium Enterprises in Indonesia', *International Journal of Business and Society*, 21(2), pp. 825–836.
- Lussier and Hendon (2016) 'Defined Benefit Retirement Fades Away', *In Human resource management: Functions, applications, skill developmen*, pp. 551– 552. Available at: <https://doi.org/10.4135/9781506326009>.
- Saputro (2019) 'Peran UMKM dalam Pembangunan Ekonomi Kota Makassar', *Jurnal Ekonomi dan Keuangan*, pp. 3(2), 33–47.
- Sari, Kurniawan and Wibowo (2019) 'Keterampilan Manajemen dalam Meningkatkan Daya Saing UMKM di Era Digital', *Jurnal Manajemen dan Kewirausahaan*, 3(2), pp. 75–88.
- Slack, Chambers and Johnston (2017) 'British Association of Dermatologists' guidelines for the management of contact dermatitis', *British Journal of Dermatology*, 176(2), pp. 317–329. Available at: <https://doi.org/10.1111/bjd.15239>.

- Sudarma (2020) 'Enhancing the Competitiveness of SMEs in Makassar through Digital Technology Adoption and Management Skills Development', *International Journal of Business and Management*, 8(3), pp. 112-129.
- Sudaryono (2017) *Metodologi Penelitian: Kuantitatif, Kualitatif, dan Mix Method*. PT Raja Grafindo Persada. Available at: doi: <https://opac.perpusnas.go.id/DetailOpac.aspx?id=853411>.
- Sulistio (2021) 'Keterampilan Manajemen dan Daya Saing UMKM: Perspektif Perkembangan Bisnis di Era Digital', *Jurnal Manajemen dan Kewirausahaan*, 5(1), pp. 50-65.
- Surbakti (2017) 'Analisis Potensi dan Permasalahan Pengembangan UMKM di Kota Makassar', *Jurnal Manajemen, Ekonomi, dan Akuntansi*, pp. 1(2), 155-167.
- Syahbana and Sembiring (2020) 'The Influence of Digital Technology Adoption on the Competitive Advantage of SMEs', *Journal of Economics, Business, & Accountancy Ventura*, 23(2), pp. 283-294.