# **CHAPTER I**

#### INTRODUCTION

## 1.1. Object Overview

MSMEs or Micro, Small, Medium Enterprises are independent productive business units, which are carried out by individuals or business entities in all economic sectors. Furthermore, the criteria and characteristics of MSMEs is regulated in Law of the Republic of Indonesia No. 7 of 2021 regarding Facilitation, Protection and Empowerment of Cooperatives and Micro, Small and Medium Enterprises (Peraturan Pemerintah Nomor 7 Tahun 2021 tentang Kemudahan, Perlindungan dan Pemberdayaan Koperasi dan Usaha Mikro, Kecil dan Menengah).

Micro Businesses is a productive business owned by an individual and/or individual business entity that meets the Micro Business criteria as regulated in this Law. As a Small Business, namely a productive economic business that stands alone, carried out by an individual or business entity that is not a subsidiary or branch of a company that is owned, controlled, or is part, either directly or indirectly, of a Medium Business or Large Business that meets Small Business criteria as intended in the Law. As a Medium Business, namely a productive economic business that stands alone, carried out by an individual or business entity that is not a subsidiary or branch of a company that is owned, controlled, or part of either directly or indirectly with a Small Business or Large Business with total net assets or annual sales proceeds as regulated in the Law.

According to the ASEAN Investment Report released in September 2022, Indonesia has the largest number of micro, small and medium enterprises (MSMEs) in the ASEAN region. The report notes that the number of MSMEs in Indonesia in 2021 has reached around 65.46 million units. This number is much higher than neighboring countries as shown in the data below:

**Table 1.1. Number of MSMEs in ASEAN Countries (2021)** 

No.	Country Name	Number of MSMEs
1	Indonesia	65.465.500
2	Thailand	3.314.400
3	Malaysia	1.226.000
5	Philippine	996.700
6	Vietnam	651.100
7	Cambodia	512.900
8	Singapore	279.000
9	Laos	133.700
10	Myanmar	72.700

Source: Databooks (www.databoks.katadata.co.id)(2021)

The Micro, Small, and Medium Enterprises (MSMEs) are the backbone of the Indonesian economy, playing a crucial role in job creation, income generation, and fostering inclusive economic growth. To this day, the vital role of MSMEs in the Indonesian economy remains significant, both in terms of the number of business units, job opportunities, and national economic growth as measured through Gross Domestic Product (Tarigan & Mawardi, 2024)

Micro, Small and Medium Enterprises (MSMEs) have a very important role in national economic development. Based on data from the Ministry of Cooperatives and Small and Medium Enterprises (Kemenkop UMKM) shows that the majority or 99% of businesses in Indonesia are at the MSME level and contribute 61,9% to the national Gross Domestic Products (GDP). Increasing the scale of MSMEs businesses has the potential to contribute significantly to overall economic growth.

In addition to their contribution to the Indonesian economics, MSMEs also contributes to the labor absorption that reaches 97%, making them an important driving force in the economy. This translates to around 119.6 million people, highlighting their crucial role in providing job opportunities and fostering economic inclusion as reported by the Central Bureau of Statistics (BPS) (Coordinating Ministry for Economic Affairs, Indonesia). This facts and figures shows that the impact and contribution of MSMEs is very large in reducing the unemployment rate

in Indonesia, contributing to the Indonesian overall economic growth. Therefore, developing MSMEs is a crucial factor in increasing the overall economic business scale.

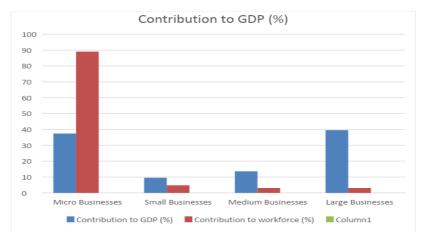


Figure 1.1. Contribution to national GDP and total workforce

Source: Kemenkop UMKM (2023)

An examination of this graph above reveals a compelling narrative regarding the composition of the Indonesian business landscape. While large enterprises undeniably hold a significant share of the national Gross Domestic Product (GDP) at 39.5%, the contribution of Micro, Small, and Medium Enterprises (MSMEs) paints a nuanced picture. Notably, MSMEs collectively contribute 60.5% to Indonesia's GDP, with micro businesses leading the way at 37.4%, followed by medium (13.6%) and small businesses (9.5%). This data underscores the crucial role MSMEs play in driving Indonesia's economic growth, nearly matching the contribution of large enterprises.

Further analysis regarding labor absorption reinforces the vital role played by MSMEs. Micro businesses demonstrate an exceptional capacity for job creation, absorbing a staggering 89.4% of the workforce. Small businesses also contribute significantly, employing 4.81% of the labor force. Followed by large and medium enterprises which play a comparatively smaller role in labor absorption, employing only 3.08% and 3.07% respectively. This data highlights the immense potential of MSMEs to generate employment opportunities, solidifying their position as a cornerstone of Indonesia's workforce. It is proven that MSMEs has had a positive impact on the Indonesian economy, providing optimism for future economic

growth potential (Edelia & Aslami, 2022).

In terms of preferred selling location, MSMEs have variety of place preference for its main selling places. A survey by INDEF, a research institute in Indonesia, shows that the majority of MSMEs preferred to conduct their business through a digital platform, namely e-commerce. This survey was conducted with MSMEs spread across Jabodetabek (30%), non-Jabodetabek Java Island (50%), And outside Java Island (20%) in December 2023 and involved 254 samples of MSMEs.

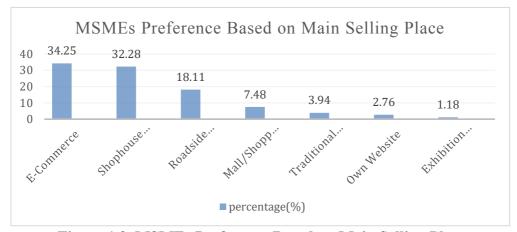


Figure 1.2. MSMEs Preference Based on Main Selling Place

Source: INDEF Survey (2023)

The graph above shows the result of the survey which is MSME preference of different places to sell their products or services. The result shows that the most popular place for MSMEs to sell is through e-commerce (34.25%). This number is the highest followed by Shophouses (32.28%), and Roadside stall (18.11%). From this survey, it shows how important e-commerce as a digital platform for MSMEs to sell their products/services.

In terms of geographical distribution, the spread of MSMEs actors occurs in all 34 provinces in Indonesia, showing the uniformity of micro, small and medium enterprises in various regions. Details regarding the geographical distribution of these registered MSMEs are provided below.

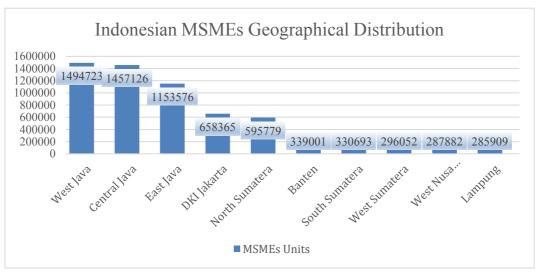


Figure 1.3. MSMEs Geographical Distribution

Source: Satudata KUMKM (<a href="https://data.go.id/">https://data.go.id/</a>) (2023)

According to the figure above, based on the number of business distribution, West Java Province ranked first with 1,494,723 MSMEs business units, followed by Central Java with 1,457,126 business units, and East Java with 1,153,576 business units followed by the fourth ranked, namely DKI Jakarta, with a total of 658,365 MSMEs business units. These differences of the numbers may be influenced by several factors such as geographical, population, infrastructure, and government support factors in each province (Tarigan & Mawardi, 2024). Although the dominance of the number of MSMEs is concentrated in Java, the overall growth of MSMEs in Indonesia until 2022 has had a positive impact on the overall economy. Provinces outside Java also make a significant contribution, reflecting the important role of MSMEs in creating jobs, diversifying the economy, and supporting sustainable development in various regions of Indonesia.

West Java boasts the highest number of MSMEs nationwide, this translates to a thriving pool of diverse MSMEs operating across various sectors within the province. The top categories for MSMEs in West Java is the culinary sector, namely food and beverages, followed by craft, fashion and other. The Association of Indonesian Entrepreneurs (HIPMI) West Java Chapter estimates that culinary MSMEs in the province contribute over 15% of the total MSME units, highlighting the importance of food and beverage businesses within the province. This sector is a significant driver of the MSME landscape in West Java.

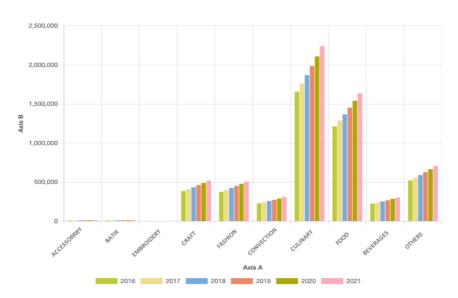


Figure 1.4. Number of West Java MSMEs based on its category

Source: Opendata Jabar (https://data.jabarprov.go.id/id) (2024)

The figure above shows data from West Java Open Data (Open Data Jabar) which is an official website managed by Diskominfo. The figure above shows the projection of the number of MSMEs based on each category in West Java. According to the latest data provided (2024), the overall view of the West Java MSMEs have experienced significant increase from 2016 until 2021 with the culinary as the leading sector of industy, followed by food industry, craft, fashion, beverages, and other various industries in the province.

The diverse landscape of industries in West Java demonstrates the adaptability and dynamism of West Java's MSMEs, catering to the diverse needs of the province residents and businesses. The growing number of MSMEs from year to year making this province's MSMEs to face intense competition, necessitating them to adapt and evolve. In the midst of intense competition, rapid strategy changes are very important to overcome changing situations and conditions. In order to remain competitive, MSMEs focus on efforts to creating synergies, exploiting competitive advantages, and providing added value in order to keep the business to thrive.

Taking advantage of new methods to improve business processes can be a key factor for the success of companies (Lorca et al., 2019). This existing

circumstance of West Java, having the highest number of current MSMEs business units, could provide a fertile ground for studying how MSMEs leverage the new methods to face the intense competition within industries which will be mainly focusing on the culinary industry due to its significant improvement every year and its highest contribution toward the overall number of the province's MSMEs.

### 1.2. Background

The world is witnessing a rapid digital revolution, this includes Indonesia. Over the last few years Indonesia have been experiencing a surge in its digital revolution, driven by a rapidly growing internet user base and increasing internet penetration. The use of digital technology continues to increase to cover almost all corners of the country and is projected to keep adding numbers over time.

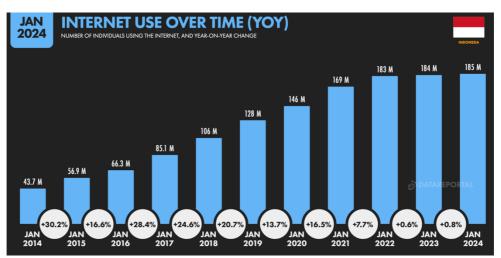


Figure 1.5. Indonesian internet use over time

Source: wearesocial, Digital 2024 (2024)

The number of internet users in 2014 was only 43,7 million. In six years, this number skyrocketed by 334,1% to 146 million users in 2020 with the average growth about 22% within 6 years period. The numbers of users keep on increasing up until this recent year, 2024, which currently has over 185 million internet users in Indonesia. This shows that the majority of the population namely 66,5% out of current total population in 2024 which reaches 278,7 million are aware of the digital revolution and adopting the current internet penetration.

This rapidly growing number of internet users creates a dynamic digital landscape and has the potential to reshape every sector of the Indonesian economy

and society. Digital-based information technology has now become an inseparable part of everyday human life. The development of information technology is highly influential to all sectors (Santoso et al., 2021). This massive digital revolution, profoundly impacting various sectors, including the business landscape. According to (Riantama et al., 2020) and (Iskandar, 2019) the financial sector is one of the areas that is clearly affected by developments in information technology. Micro, Small, and Medium Enterprises (MSMEs) are no exception, facing both challenges and opportunities in this evolving environment.

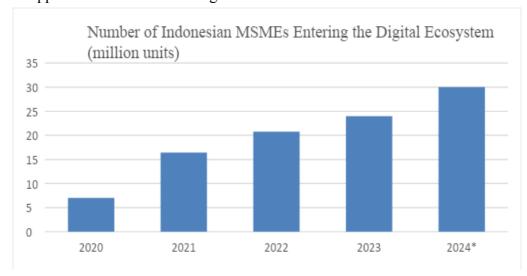


Figure 1.6. Number of Indonesian MSMEs Entering the Digital Ecosystem

Source: Ministry of Cooperatives and MSMEs (Kemenkop UMKM) (2023)

The digital economy plays a crucial role in modernizing a country's economic landscape, fostering innovation, enhancing productivity, and creating new opportunities for businesses and individuals(Abeliansky et al., 2021). Study by (Rini Dwi Astuti et al., 2023) shows that the digital economy contributes significantly to GDP growth by enhancing productivity across various sectors. Furthermore, study by (Xia et al., 2024) shows that digital economy was recognized as a primary driver of economic growth and development. Countries with higher digital adoption experience faster economic growth due to increased efficiency and innovation.

The digital revolution has fundamentally reshaped the business landscape, particularly for Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. This

shift has fundamentally reshaped how MSMEs operate, interact with customers, and compete in the marketplace. Embracing technological advancements becomes crucial for MSMEs to thrive and stay competitive. The graph above shows that the growth of digital revolution in Indonesian MSMEs from 2020 keep having significant growth and is projected to keep on growing until 2024. In 2022, the Ministry of Cooperatives and MSMEs noted that the number of MSMEs that have entered the ecosystem has reached 20.76 million units. This number has increased by 26.6% compared to the previous year's 16.4 million MSMEs in 2021 and 7 million digital adoption in 2020. From these numbers, it means that 32.44% of the 64 million MSME units have entered the digital ecosystem.

Digital economic and financial activity in Indonesia have been experiencing significant increase. The huge potential for digitalization in Indonesia can increase economic growth worth 150 billion US dollars annually before 2025 (Das et al., 2016). New digital consumers increased by 21 million and internet penetration rose to 74% of the population. In turn, this is a new balance point for financial services in the digital era. In Indonesia, approximately 98% of merchants already use digital payments and 59% including utilizing digital financing (Bank Indonesia, 2023a)

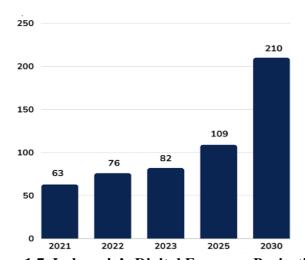


Figure 1.7. Indonesia's Digital Economy Projection

Source: Google, Temasek, & Bain Company (2022)

The overall value of Indonesia's digital economy in 2023 projected to grow 8 percent from the previous year or is predicted to be at the level of USD 82 billion. This value is predicted to grow to USD 109 billion in 2025. In 2030, Indonesia's

digital economy is estimated to reach USD 210 billion to USD 360 billion. (Google et al., 2024).

As of 2023, around 27% of MSMEs in Indonesia have been digitized (GoodStats Data, 2024.) This shows a significant increase in recent years, especially with various government programs that encourage the digitization of MSMEs. One of the government's program in order to boost digital economy is the "Gerakan Nasional Bangga Buatan Indonesia," a national movement initiated by the government to promote the digitalization of MSMEs across Indonesia. The support of the government behind MSMEs digitalization is due to their huge number across the nation, which significantly larger than the number of large enterprises especially in West Java. MSMEs are indeed very important not only as a source of employment, but, potentially, as a growth engine for the nation's economy.

In comparison, in other ASEAN countries, the level of digitization of MSMEs varies. For example, in Malaysia, around 37% of MSMEs have been digitized in 20222. Meanwhile, in Thailand, around 30% of MSMEs have switched to digital platforms. Research by (TAMBUNAN, 2020) refer that the use of internet by MSMEs in Indonesia is still very low, despite the high number of internet penetration nationwide. Existing studies reveal several explanations, which include their low understanding of the importance of ICT for their businesses, their mindset which is not in favor of using ICT in doing their businesses, their lack of knowledge on how to operate this technology, and lack of owners' innovativeness (TAMBUNAN, 2020).

The digitalization of the economy and finance is shifting people's preferences towards financial services that are fast, easy, cheap, safe and reliable (Bank Indonesia, 2023a). This phenomenon occurs evenly in all parts of the world, including Indonesia. With a predominantly young population, Indonesia has emerged as a potential market. In 2022, almost 70% of the population will be in the 15–64 year age group (Badan Pusat Statistik, 2024). Apart from that, the infrastructure that supports digitalization (electricity, high speed internet and cellular) is becoming more widespread, easier and cheaper to access. This massive

growth of Indonesia's digital economy is found to be mainly driven primarily by e-commerce (Fig 1.7). Such projections cast a powerful spotlight on the potential of the country's digital economy.

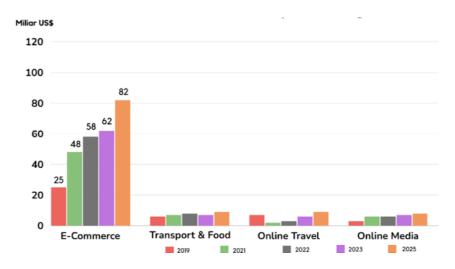


Figure 1.8. Contribution to Indonesia's Digital Economy per Sector

Source: Google, Temasek, Bain (2023)

By sector, e-commerce has the largest contribution to the development of the digital economy in Indonesia. Apart from e-commerce, several other sectors also support the digital economy in Indonesia, including transportation & food, online travel, and online media. The presence of e-commerce or electronic commerce has had a significant impact on the development of the real sector, especially in the MSMEs business field in Indonesia. The significant growth of E-commerce can act as a medium for developing MSMEs which are the main contributors to Indonesia's digital economy, contributing more than 60% of the total nation GDP.

Previous studies have shown that by using digital technology optimally in running their business, MSMEs can get a number of benefits, including being able to reach a larger consumer base, increase income, facilitate monitoring of business activities, and reduce costs, especially marketing, logistics and shipping costs. Study (Andonov et al., 2021) shows that E-commerce has resulted in being a highly imperative concept for businesses in the modern world. MSMEs can make use of the technology to not only reach out to a higher set of audiences but also increase

the effectiveness and efficiency of work. In line with this, study by (Anggadwita et al., 2021) showed that technology and innovation capabilities have a positive and significant effect on the business resilience of MSMEs. Some previous studies have also pointed out the importance of digital technology adoption and capabilities for micro, small and medium enterprises particularly in improving their competitiveness and performance (Duch-Brown et al., 2017)(Jafari Sadeghi & Biancone, 2018) (Pal et al., 2008) (Zhou et al., 2019).

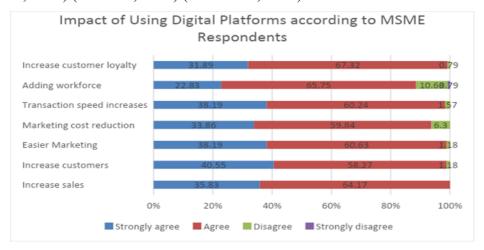


Figure 1.9. Impact of Using Digital Platforms according to MSME Respondents

Source: Databoks (databoks.katadata.co.id) (2023)

In December 2023, Institute for Development of Economics and Finance (INDEF) conducted a survey of 254 samples of MSMEs spread across Jabodetabek (30%), non-Jabodetabek Java Island (50%), And outside Java Island (20%) regarding the Role of Digital Platforms in MSMEs Development in Indonesia. The sample was selected using a purposive sampling technique, with the criteria being that MSMEs have online and offline shops, have been actively operating for at least the last 6 months, and are actively carrying out online transactions.

The survey results show that 100% of MSMEs respondents agree that using digital platforms can increase sales. In detail, 64.17% agreed and 35.83% strongly agreed. Most MSMEs respondents agree that digitalization in businesses, namely using the digital platform, can increase the number of customers, simplify the marketing process, and reduce marketing costs. As a result, MSMEs that

successfully utilized e-commerce as the digital platform gained a significant competitive advantage and growing stronger in the new digital marketplace. E-Commerce, as a digital platform for buying and selling goods and services, has revolutionized the way businesses connect with consumers. It offers a valuable tool to reach a wider customer base beyond their immediate locations.

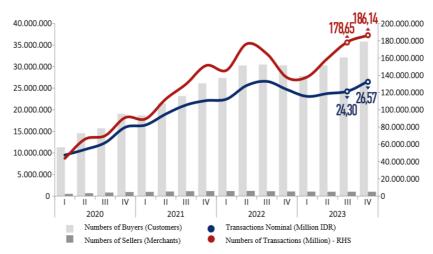


Figure 1.10. West Java E-Commerce Transaction Growth 2020-2023

Source: Bank Indonesia (2023)

Research by (Sari et al., 2016) showed that Indonesian MSMEs had a high degree of willingness to use e-commerce in the future. This is also reflected in West Java e-commerce adoption that show a significant growth in terms of transaction nominal from year to year. The figure above illustrates the trends in e-commerce transactions among West Java MSMEs from 2020 to 2023. There is a steady increase in both the number of buyers and sellers from 2020 to 2023, indicating a growing adoption of e-commerce platforms among West Java MSMEs. The number of sellers seems to have grown more consistently, reflecting the increased willingness of MSMEs to engage in e-commerce. Furthermore, there is a clear upward trend in both transaction volume and value from 2020 through 2023, reflecting a growing e-commerce ecosystem.

Despite the significant increase of e-commerce transaction growth in Indonesia, the transaction volume shows notable fluctuations, with significant peaks observed in Q4 of 2022 and Q4 of 2023. The nominal value also shows

growth but with a smoother trend compared to the transaction volume. However, the largest spike in nominal value occurs in Q4 of 2023, corresponding with the highest transaction volume. The data indicates that e-commerce is becoming an increasingly integral part of West Java MSMEs sector, with more businesses and consumers engaging in online transactions each year. The consistent growth, despite fluctuations, presents opportunities for MSMEs to capitalize on e-commerce platforms to enhance their competitive advantage and sales performance, especially during peak periods.

Furthermore, the rapid digital economy adoption in the financial sector have also been changing the payment system, which is a tool in economic transactions. While e-commerce platforms connect businesses with a wider audience, electronic money empowers customers to finalize transactions efficiently. The digital economy adoption both in E-commerce and Electronic Money transactions are both growing rapidly offering innovative consumer-oriented solutions. Approximately 98% of merchants already use digital payments and 59% including utilizing digital financing.

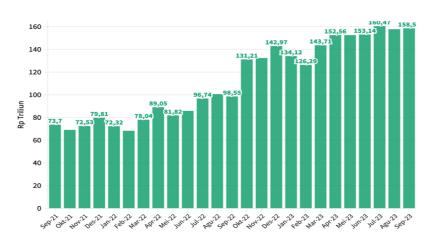


Figure 1.11. Indonesian Electronic Money Transaction Growth

Source: Bank Indonesia (2023)

Indonesia's electronic money landscape continues to flourish, with Bank Indonesia (BI) recording a transaction value of IDR 158.59 trillion in September 2023. This represents a modest month-on-month (m-to-m) increase of 0.5% compared to August, but a significant year-on-year (yoy) surge of 60.9% when

contrasted with September 2022's figure of IDR 98.55 trillion. This sustained growth highlights the increasing consumer preference for cashless transactions.

Responding to these dynamic trend, Bank Indonesia published the Indonesian Payment System Blueprint 2025 (BSPI 2025) in November 2019. This blueprint is oriented towards efforts to build a healthy ecosystem to guide digital economic and financial development in Indonesia. In its development, QRIS has facilitated payment connectivity between countries since 2022, covering Malaysia, Thailand and now Entering Singapore. Strong synergy between countries, especially in regions under the umbrella of Regional Payment Connectivity (RPC), is one of the main strategies in expanding QRIS acceptance which will be of great benefit to the trade and tourism sectors, especially for MSMEs players.

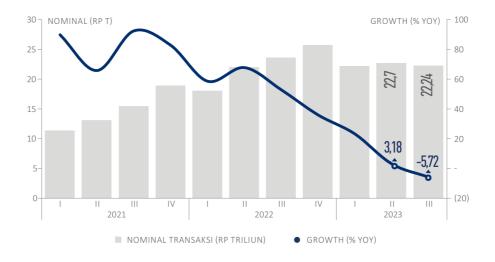


Figure 1.12. Transaction Nominal of Electronic Money in West Java

Source: (Bank Indonesia, 2023)

In contrary, despite the significant growth of electronic money transactions in Indonesia, West Java shown to experience a decrease of nominal transactions in Electronic Money along with the increase in mobility of people who are accustomed to the hybrid pattern. This is also confirmed by the decrease in nominal transactions in e-commerce in the 3rd Quarter of 2023 (Figure 1.9) which contracted by -8.55% (yoy) or worth 24.30 trillion Rupiah. However, a hybrid lifestyle, namely offline and online, has become commonplace in the midst of today's lifestyle, so that even though there has been an increase in community mobility, the number of online

shopping transactions via e-commerce in the 3rd Quarter of 2023 continued to grow by 8.41% (yoy) or reached 178.65 million transactions, accompanied by an increase in the number of buyers in e-commerce by 5.42% (yoy).

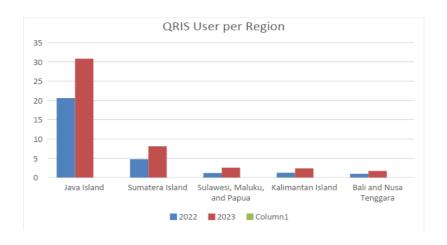


Figure 1.13. Number of Indonesian QRIS user per region

Source: Bank Indonesia (2023)

The development of digitalization in West Java can be seen from various economic indicators such as e-commerce transactions and transactions using QRIS (Bank Indonesia, 2023). The graph above shows the growth of QRIS user from 2022 to 2023 per region. In terms of the number of users, QRIS has reached 43.44 million or the equivalent of 92% of the total target by the end of 2023 which is 45 million. This represents an increase of 58.5% compared to 2022, when there were 28.8 million users. The data also reveals that Java Island boasts the highest number of QRIS users, with a staggering 30.79 million users. This is followed by Sumatra Island with 8.12 million users, highlighting the regional disparities in QRIS adoption. Sulawesi, Maluku, and Papua with 2.57 million users, Kalimantan, Bali, and Nusa Tenggara with 2.38 million users, and 1.71 million users in other regions.

West Java leads by a significant margin with 30.79 million QRIS users. This can be beneficial for Java MSMEs, considering the Island's diverse population and high number of MSMEs business units, especially in West Java Province. The ease of online transactions, coupled with the potential for global reach, has opened new avenues for MSMEs to expand their market presence. However, disparities occur in digital payment adoption across Indonesia shown by the sharp drop in QRIS

users in other regions, such as Sumatra (8.12 million), Sulawesi, Maluku, and Papua (2.57 million combined), and Kalimantan, Bali, and Nusa Tenggara (2.38 million combined). This indicates that while digital payments are widely accepted in Java, other regions lag behind, possibly due to various socio-economic and infrastructural challenges.

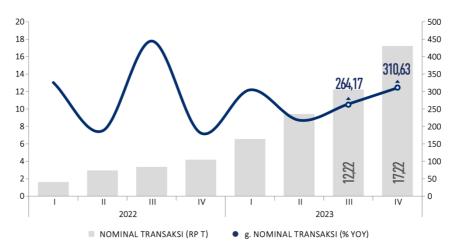


Figure 1.14. QRIS transactions nominal in West Java (yoy)

Source: Bank Indonesia (www.bi.go.id) (2024)

In contrary with the transaction nominal of electronic money in West Java (Figure 1.12), the QRIS transaction nominal in West Java showed a significant growth from 2022 to 2023. This indicates that while the overall electronic money transactions does not show a significant growth, QRIS transactions keeps on increasing, indicating that in West Java, people tend to choose QRIS transactions as their preferred transaction method rather than other electronic money.

Nominally, QRIS transactions in the fourth quarter of 2023 grew by 310.63% (yoy) or reached IDR 17.22 trillion, higher than the previous quarter which was recorded at 264.17% (yoy) or reached IDR 12.22 trillion. QRIS transaction volume was also recorded to have increased by 214.08% (yoy) or reached 170.45 million transactions, higher than the third quarter of 2023 of 201.26% (yoy) or reached 170.45 million transactions. As of January-August 2023, the QRIS transaction volume in West Java was recorded at IDR233.59 million or 125.03% of the target transaction volume, with a transaction nominal reaching

IDR23.10 trillion. This achievement was also driven by the National QRIS Week (PQN) in August 2023 in West Java, where many QRIS transactions were carried out with small nominal amounts.

However, despite the continuous growth of QRIS adoption, there is a fluctuation in QRIS merchant growth rates, with notable peaks in Q3 2022 and Q4 2023 and dips in Q2 2022 and Q2 2023. These fluctuations show that transaction growth is not consistent throughout the year but varies due to different influencing factors. The highest fluctuation is observed in 2023, where the growth rate shoots up dramatically from Q2 to Q4, indicating a period of accelerated economic activity or increased consumer spending. These fluctuations highlight the periods of rapid growth and periods where growth slows down for QRIS transactions in West Java, which might be caused by various factors, such as seasonal economic activities, government initiatives such as National QRIS Week (PQN) in August 2023, and other factors

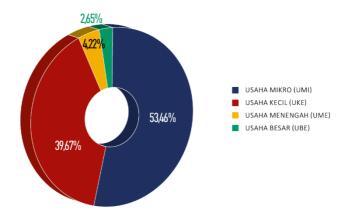


Figure 1.15. Proportion of QRIS Merchants Based on Business Scale in West

Java

Source: Bank Indonesia (www.bi.go.id) (2023)

Based on business scale, QRIS merchants in West Java are dominated by Micro Businesses with a share of (53,46%), followed by Small Businesses (39.67%), Medium Businesses (4,22%), and Large Businesses (2.65%). Spatially, the majority of QRIS merchants in the West Java region are in Bandung City (28.72), followed by Bekasi City (15.47%), Bogor City (12.77%), and Depok City (6.44%). The increasing implementation of digital payments via QRIS is also

driven by public awareness to use digital transactions for the vision of West Java Province becoming a Digital Province.

The acceptance of QRIS within the MSMEs sector is supported by various reasons, mainly because of the benefits that the system provides. Research by (Wardhani et al., 2023) shows that some of the benefits of using QRIS as a digital payment tool is to make transactions faster, easier, cheaper, safer and more reliable, increase the financial performance of MSMEs in terms of the number and nominal of transactions, and increase sales turnover and business cash flow rapidly up to two times. As for recording sales using QRIS, recording becomes easier and more accurate.

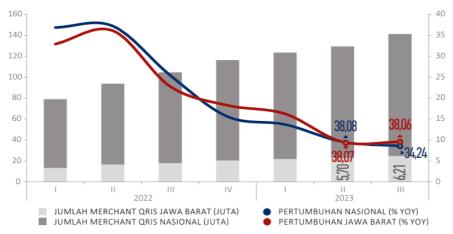


Figure 1.16. QRIS merchant growth in West Java

Source: Bank Indonesia (www.bi.go.id) (2024)

The figure above (Figure 1.15) illustrates the growth of QRIS merchants in West Java and nationally from 2022 to the first three quarters of 2023. The graph is divided into two categories: the number of merchants and the year-on-year (yoy) growth rate. Regarding the number of QRIS merchants, West Java shown to have experienced rapid expansion, outpacing the national average. The growth reached its peak in the third quarter of 2022, followed by a slight decline. The growth rate has stabilized in 2023, though it remains higher than the national average. West Java has consistently outperformed the national average in terms of QRIS merchant growth. The continued expansion of QRIS merchants suggests a promising future for digital payments in Indonesia, especially in West Java.

Despite the increasing number of merchants utilizing QRIS, the growth rate has not been constant, with fluctuations observed initiated by the drastic downward movement of the merchant growth (%). This indicates that the pace of QRIS adoption in West Java has been inconsistent. One of the primary factors influencing the inconsistent adoption of QRIS in West Java is the varying levels of digital literacy and access among MSMEs (Micro, Small, and Medium Enterprises). In areas where business owners and customers are more familiar with digital payments, adoption rates tend to be higher. Conversely, in regions where digital literacy is lower, there may be reluctance or slower uptake of QRIS(Nanang Wahyudin et al., 2022).

Embracing the efficiency of digital economy adoption, namely e-commerce holds immense potential for MSMEs to not only boost sales and productivity but also establish a competitive edge by embracing the efficiency and convenience offered by digital technologies. Among the transformative tools reshaping the business landscape, the previous graphs have shown that Electronic Commerce (E-Commerce) and QRIS emerge as pivotal contributors to the modernization of transactional processes. The use of digital tools to empower MSMEs is shown to increase the productivity of MSMEs in Indonesia, both in terms of transactions and nominal sales, profits and cost efficiency (Sulistyaningsih & Dr. Hanggraeni, 2021). This digital leap transformed consumer behavior, driving a surge in online shopping and a preference for contactless transactions.

Previous research from (Octavia et al., 2020) shows that in Indonesian MSMEs, E-Commerce has a positive and significant relationship to business performance. (Graupner et al., 2021) (Ahuja et al., 2021) showed that e-commerce is growing as additional revenue streams for companies. This research also in line with research from (Udayana et al., 2024) which shows that in MSMEs, E-Commerce has a positive and significant relationship to business sustainability. (Wahyuni et al., 2020) found that the use of e-commerce in the MSMEs business in Jember provides a beneficial impact on business performance, to be precise financial performance, service performance, marketing performance, sales performance, internal operating performance, and innovation performance.

Previous research by (Wardhani et al., 2023) shows that the adoption of QRIS has an impact on the financial performance in Indonesian MSMEs, especially the micro-entrepreneurs, where financial performance is related to an increase in the number and nominal of transactions, sales turnover, business cash flow and sales records. In line with this, (KWABENA et al., 2021) also finds that digital payments have proven to positively and significantly impact on MSMEs performance.

Competitive advantage is one of the important factors in improving company's sales performance. Digital tools can improve company's competitive advantage (Nelson, 2001). The influence of digital tools on the performance of MSMEs is getting bigger when through competitive advantage. This is due to the existence of several benefits of competitive advantages that can be achieved by MSMEs using e-commerce, including reading market movements and responding to customer needs quickly, which leads to the improvement of MSMEs performance (Irwan Hariandi et al., 2019). This is in line with research by (Noor & Shariff, 2022) that showed competitive advantage has direct positive and significant influence to business performance. The significant effect of competitive advantage on business performance suggests firms with greater competitive advantage tend to achieve higher business performance than competitors.

Although various research have shown the significant effect of digital adoption towards sales performance, research by (Irwan Hariandi et al., 2019) showed that the influence of e-commerce in improving MSMEs performance is not significant. However, mediation of competitive advantage increases the influence of e-commerce on performance. This highlights the important role of competitive advantage as a medium in improve sales performance in MSMEs. In contrary, research by (Nanang Wahyudin et al., 2022) shows that using e-commerce and QRIS affects the sales performance of MSMEs in Belitung both directly and indirectly through competitive advantage.

Previous facts and figures have shown the significant growth of both ecommerce and QRIS in Indonesia, especially in the West Java Region. Various studies have also proven its positive influence and numerous benefits on MSMEs. However, despite its significant growth and its variety of benefits, fluctuations occur in the utilization of these digital tools. This highlights that challenges occur in fully capitalizing on the benefits of this digital adoption. Study by (Avrianto & Wahyuningsih, 2023) states that challenges regarding the utilization of digital tools in West Java MSMEs can be attributed to several factors, such as digital divide and infrastructure, user readiness and literacy, and regulatory environment.

The digital divide, characterized by uneven access to technology and internet infrastructure in developing areas where digital infrastructure is still being developed. This issue is in developing areas in West Java where digital infrastructure is still being developed. The level of digital literacy among users, particularly MSMEs, also plays a crucial role in the effective utilization of digital tools. In areas where business owners or customers have limited digital skills, there may be reluctance to adopt or fully utilize these technologies. This can result in inconsistent usage patterns and fluctuations in the growth of digital tools like QRIS. Furthermore, the regulatory framework surrounding digital payments and ecommerce can also influence the adoption and utilization of these tools. Inconsistent or unclear regulations may create uncertainty, discouraging businesses from adopting digital solutions. Furthermore, the pace at which regulations are updated to keep pace with technological advancements can affect the growth of digital tools.

Similar challenges faced by the MSMEs in Malaysia found in study by (Oryza et al., 2023) such as connectivity issues, showed by the MSMEs in the urban Malaysian urban area are unwilling to adopt the cashless system and have a 3G sunset issue. Besides connectivity issues, Malaysian MSMEs also experiencing the practicality issues, where the MSMEs in the rural area are unable to expedite, even though they are willing to adopt the cashless system. Whilst in Belitung, the major challenge felt by MSMEs both owners and employees, is that there is still a lack of knowledge about the optimal use of e commerce and QRIS (Nanang Wahyudin et al., 2022).

Although the challenges and obstacles occur, MSMEs have a wide opportunity to become a leading sector in economic growth if they can face global

competition by increasing their competitiveness, professionally with digital marketing transformation (Thrassou et al., 2020). Research by (Kiselicki et al., 2022) showed that consumers in developing countries are open to online shopping, with satisfied trust and security parameters. E-commerce in developing countries has an excellent perspective for the future and a great space for progress and improvement. This creates opportunity for the further research in developing country such as Indonesia, especially within the unique context of West Java which supported by its rapidly growing numbers of digital transformation and MSMEs growth.

This interesting background, showing the skyrocketed digital economy adoption dominated by E-commerce followed by the rapidly growing electronic transaction, makes this topic interesting to investigate further on the adoption, utilization, and impact of the digital adoption on the sales performance of MSMEs. West Java, with the current highest number of MSMEs and the diversity of its sectors of businesses, play a crucial role in contributing to economic growth nationwide and provides a compelling research environment.

While existing research explores the potential benefits of e-commerce and cashless payments for MSMEs, a gap exists in understanding their specific impact on sales performance, through a mediating role of competitive advantage, especially within the unique context of West Java. Therefore, the author figured that it is necessary to test the significance of the impact in order to provide detailed insights which could then be used for practical and theoretical aspects in the future. By providing detailed insights into the effective use of e-commerce and QRIS, the findings in this study hopes to guide MSMEs and business owners to consider these technologies into their businesses.

The successful integration of these digital tools is envisioned to support the overarching goals of the government's movement, thereby fostering a more robust digital economy for the nation. Therefore, this thesis seeks to unravel how the utilization of E-Commerce and QRIS as digital payment tools play a crucial role in elevating sales performance through their competitive advantage within the unique context of West Java, as the largest number of MSMEs units nationwide. Based on

the background in this study, the researchers raised theme of the study with the title "The Utilization of E-Commerce and QRIS as Digital Payment Tools to Improve Sales Performance through Competitive Advantage in West Java MSMEs".

#### 1.3. Problem Statements

Various research (Wardhani et al., 2023) (KWABENA et al., 2021) (Kiselicki et al., 2022) (Octavia et al., 2020) (Udayana et al., 2024) (Wahyuni et al., 2020) have shown that digital adoption such as e-commerce and QRIS proven to have a positive and significant impact on MSMEs performance. However, there's still not enough research that includes the mediating role of competitive advantage on the sales performance. This creates a gap in understanding the impact of these digital tools on sales performance with the mediating role of competitive advantage.

Research by (Irwan Hariandi et al., 2019) showed that the influence of e-commerce in improving MSMEs performance in Banyuwangi is not significant. However, mediation of competitive advantage increases the influence of e-commerce on performance. This indicates that while e-commerce does not directly influence sales performance, there's a crucial role of mediating role from competitive advantage into the sales performance. This highlights the importance of competitive advantage as a medium in improve sales performance in MSMEs. In contrary with this research, (Nanang Wahyudin et al., 2022) shows that using e-commerce and QRIS affects the sales performance of MSMEs in Belitung both directly and indirectly through competitive advantage.

Although the impact have been proven to be positive and significant in the context of Belitung and Banyuwangi, the difference in the significance of e-commerce and QRIS on MSME performance, whether directly or through competitive advantage, suggests that there may be regional factors or specific business environments that influence these relationships differently. Further research in understanding their specific impact on sales performance through a mediating role of competitive advantage is necessary in order to provide detailed insights which could then be used for practical and theoretical aspects in the future, especially within the unique context of West Java, which currently leading in terms of MSMEs number, supported by its thriving pool of diverse MSMEs operating

across various sectors within the region.

Based on the problem statement above, it could be concluded that the questions in this research are as follows

- 1. How much is the influence of E-Commerce on the competitive advantage of West Java MSMEs?
- 2. How much is the influence of QRIS on the competitive advantage of West Java MSMEs?
- 3. How much is the influence of E-commerce on the sales performance of West Java MSMEs?
- 4. How much is the influence of QRIS on the sales performance of West Java MSMEs?
- 5. How much is the influence of competitive advantage on the sales performance of West Java MSMEs?
- 6. Does E-commerce influence sales performance of West Java MSMEs through competitive advantage?
- 7. Does QRIS influence sales performance of West Java MSMEs through competitive advantage?

### 1.4. Research Objective

Based on the problem formulation that has been described, the objectives of this research are as follows:

- 1. To examine how much influence e-commerce platform usage have on the competitive advantage of West Java MSMEs.
- 2. To examine how much influence QRIS adoption have on the competitive advantage of West Java MSMEs.
- 3. To examine how much influence e-commerce have on the sales performance of West Java MSMEs.
- 4. To examine how much influence QRIS have on the sales performance of West Java MSMEs.
- 5. To examine how much influence does competitive advantage have on the sales performance of West Java MSMEs
- 6. To examine how does competitive advantage mediates the influence of E-

commerce on Sales Performance of West Java MSMEs

7. To examine how does competitive advantage mediates the influence of QRIS on the sales performance of West Java MSMEs

### 1.4.1. Theoretical Aspects

It is hoped that this research can help to expand knowledge as well broaden insights into the field of economics and business. This research also seeks to serve as a valuable resource for future scholars and practitioners by providing a foundation for further research and practical applications related to similar topic, regarding the utilization of E-Commerce and QRIS in the business development sector.

#### 1.4.2. Practical Aspects

It is hoped that this research offers practical applications that benefit West Java MSMEs, policymakers, e-commerce platforms, QRIS providers, and other related industries in understanding the utilization of E-Commerce and QRIS within MSMEs, empowering West Java MSMEs to enhance their performance, gain a competitive advantage, and contribute significantly to the city's digital economy. Additionally, this thesis seeks to align with and contribute to the "Gerakan Nasional Bangga Buatan Indonesia," a national movement initiated by the government to promote the digitalization of MSMEs across Indonesia. By providing detailed insights into the effective use of e-commerce and QRIS, this study hopes to guide MSMEs and business owners toward adopting these technologies in their operations.

### 1.5. Writing Systematical

Contains systematics and a brief explanation of research reports consisting of Chapters I to V in research reports.

### **CHAPTER I INTRODUCTION**

This chapter explains the general description of the research object and setting background, problem formulation, research objectives, benefits of research and systematics writing.

#### CHAPTER II LITERATURE REVIEW

This chapter explains the theories used from general to specifically,

accompanied by previous research and continued with the research framework as well as hypotheses

## CHAPTER III RESEARCH METHOD

This chapter will explain about method that used in this research to collect and analyse to findings the answer for the research. This chapter contains Types of Research, Operationalization of Variables, Population and Samples, Data Collection, Validity and Reliability Tests, and Data Analysis Techniques.

## CHAPTER IV RESEARCH AND DISCUSSION

This chapter explains the results and discussion obtained from the research.

## CHAPTER V CONCLUSION AND SUGGESTION

This chapter explains the research conclusions and suggestions given