Increasing MSME Competitiveness through Creativity and Innovation in The Digital Era Study at Simping MSME Centers in Purwakarta

B Lena Nuryanti Sastradinata[1], Ismi Noer Pratiwi[2],
Sulastri Sulastri[3]
[1-3]Universitas Pendidikan Indonesia

lenanuryanti@upi.edu

Abstract. In the rapidly advancing digital era, Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the global economy. However, with the rapid advancement of digital technology, business competition has become increasingly fierce, presenting new challenges for MSMEs to remain relevant and thrive. To navigate this landscape, MSMEs must enhance their competitiveness through creativity and innovation by adopting business strategies that align with technological advancements. Many experts have recognised the importance of creativity and innovation in enhancing the competitiveness of MSMEs in the digital era. According to Patel and Fiedler (2018), MSMEs that embrace innovation in their products, processes, and marketing strategies tend to have a solid competitive advantage. Similarly, Nambisan and Baron (2019) emphasise that creativity driving innovation is key to creating long-term competitive advantage for MSMEs. Furthermore, Chandra and Yudhistira (2020) highlight that creativity and innovation play a crucial role in expanding market share and improving the competitiveness of MSMEs in the digital era. They observe that MSMEs capable of generating creative ideas and implementing innovation through digital technology can achieve better growth and sustainable profits. In this study, we aim to deepen the understanding of the role of creativity and innovation in enhancing the competitiveness of MSMEs in the digital era. Through an analytical approach and empirical data, we will analyse the impact of creativity and innovation strategies on the growth and success of MSMEs in leveraging digital technology.

Keywords: MSMEs, creativity, innovation, competitiveness, digital era.

INTRODUCTION

In entrepreneurship, SMEs, creativity, innovation, competitiveness, and the digital era, it is important to understand that creativity and innovation serve as the foundation for SMEs to create competitive advantages in the digital era. In a competitive environment, SMEs that can adopt digital technology, generate creative ideas, and effectively implement innovations have a better chance of thriving and succeeding in the market. Entrepreneurship in the context of SMEs involves creating, developing, and managing relatively small businesses with limited resources. SMEs are crucial in economic growth, job creation, and reducing unemployment rates (Hisrich et al., 2017; Acs & Szerb, 2009).

In today's digital era, SMEs face both opportunities and challenges. Technology's rapid advancement has revolutionised how businesses operate and interact with customers. Digital tools and platforms offer new marketing, sales, and customer engagement avenues. However, SMEs must navigate this digital landscape effectively to leverage these opportunities and stay competitive.

Creativity plays a vital role in the success of SMEs in the digital era. It involves generating unique ideas, thinking outside the box, and finding innovative solutions to meet customer needs. Creative thinking allows SMEs to differentiate themselves from competitors and develop innovative products, services, and business models.

Innovation complements creativity by transforming creative ideas into practical solutions. SMEs must adopt innovative strategies to adapt to changing market dynamics and customer preferences. Innovation can involve improving existing processes, developing new products or services, or exploring new business models that align with the digital landscape.

Competitiveness is crucial for SMEs to thrive in the digital era. It involves offering unique value propositions, meeting customer

expectations, and differentiating fromcompetitors. By embracing digital technologies, leveraging creativity, and implementing innovative approaches, SMEs can enhance their competitiveness and attract a more extensive customer base. Understanding the interplay between entrepreneurship, SMEs, creativity, innovation, competitiveness, and the digital era is essentialfor researchers, policymakers, and business owners. By exploring and harnessing the potential of creativity and innovation in the digital context, SMEs can unlock new growth opportunities and contribute to economic development.In the long run, several important considerations exist in developing businesses, especially in the Micro, Small, and Medium Enterprises (MSMEs) sector. One crucial aspectis the creativity and innovation within an entrepreneur. Studies conducted by Angkat & Nawawi (2022), Dewi et al. (2018), Ludiya & Mulyana (2020), Nuryanti et al. (2020), Thomas W. Zimmerer et al. (2008) and Widjaja & Winarso (2019) have shown that creativity and innovation play a significant role in developing MSMEs. Creativity is the ability to generate new ideas, think of innovative solutions, and think beyond conventional boundaries. In the context of MSMEs, creativity is the foundation for developing unique and appealing products, business processes, and business models that attract the market.Creativity allows MSMEs to differentiate themselves from competitors and capture customers' interest in the digital era, which is full of choices. This involves innovation, which is the implementation of creative ideas into tangible actions. MSMEs that effectively implement innovation can create added customer value and achieve competitive advantages. In the digital era, innovation often involves using digital technology to develop new products or services, improve operational efficiency, and create unique customer experiences.

Creativity and innovation help MSMEs achievea competitive advantage in a competitive market. By generating creative ideas and implementing relevant innovations, MSMEs can offer unique value to customers and differentiate themselves from competitors. This competitive advantage can include competitive pricing, superior product or service quality, satisfying customer experiences, or responsiveness to market changes. In the digital era, which has drastically transformed the business landscape, digital technology and changes in consumer behaviourhave created new opportunities and challengesfor MSMEs. (Tapscott, 1996; Brynjolfsson &McAfee, 2014; West & Farr, 1990). Creativity and innovation have becomeeven more crucial in the digital era to confront rapid changes, leverage digital technology for business advantages, and adopt business models relevant to the digital environment. Creativity refers to generating new ideas, thinking outside the box, and developing unique solutions. On the other hand, innovation involves implementing creative ideas into tangible actions, whether in product development, business processes, or business models. The combination of creativity and innovation serves as a powerful resource for an entrepreneur to face competition and create added value for their business (Angkat &Nawawi, 2022; Dewi et al., 2018; Ludiya & Mulyana, 2020; Nuryanti et al., 2020; Thomas. W. Zimmerer et al., 2008; Widjaja & Winarso, 2019). Creativity and innovation have become increasingly crucial in facing technological changes and leveraging them for business advantages in the ever-evolving digital era. Small and Medium Enterprises (SMEs) that can embrace creativity and innovation in their business strategies tend to have a solid competitive edge in the digital era (Angkat & Nawawi, 2022; Dewi et al., 2018; Ludiya & Mulyana, 2020; Nuryanti et al., 2020;Zimmerer et al., 2008; Widjaja & Winarso, 2019).

The relationship between entrepreneurship, SMEs, creativity, innovation, competitiveness, and the digital era will assist SMEs in designing effective business strategies, adapting quickly to changes, and capitalising on existing opportunities. Creativity and innovation are key to creating sustainable competitive advantages and ensuring the success of SMEs in this dynamic digital era. In this research, we will analyse the role of creativity and innovation in the long-term business development of SMEs in the digital era. We will gather relevant data and information through a comprehensive research approach and analyse findings from experts and related studies. We aim to provide deeper insights into the importance of creativity and innovation in enhancing the performance and success of SMEs in the digitalera. Micro, Small, and Medium Enterprises (MSMEs) are crucial and significantly contribute to a country's economic growth, including Indonesia. Cited data demonstrate the various contributions of MSMEs in the economicsector. MSMEs contribute to 63.58% of theGross Domestic Product (GDP) formation. Thisindicates that MSMEs substantially contribute to creating value for the country's economy. MSMEs have a strong capacity to absorb the workforce, reaching as high as 99.45%. This means that MSMEs provide significant employment opportunities for the population, helping to reduce the unemployment rate in Indonesia. MSMEs also contribute to the total export value, reaching 18.72%. This shows that MSMEs can potentially increase the country's foreign exchange earnings by exporting their products. MSMEs also contribute to the investment sector, accounting for 60.4% of the total investment. Foreign investment also contributes significantly, particularly in the food and beverage sector, amounting to 14.1%. This

highlights that MSMEs attract investments in various sectors.

In the trade, transportation, and small-scale industries sector, MSMEs, particularly in the ready-made garment and handicraft businesses such as furniture, play a crucial role as foreign exchange earners for the country. This indicates that MSMEs have significant potential to enhance the country's revenue through the export sector. Experts such as Angkat & Nawawi (2022), Bambang Agus Windusancono (2021), Reny T. J Munthe & Rahadi (2021), and Putra RP (2020) have observed and highlighted the important contribution of MSMEs to economic growth, job creation, and foreign exchange earnings in Indonesia. In early 2020, Indonesia and the world experienced a shock due to the outbreak of the coronavirus or Covid-19. This pandemic spread globally and affected almost every sector of life, including the economy, which is a significant pillar of society. The impact of the COVID-19 pandemic was strongly felt in the slowdown of the economy in Indonesia, particularly in the Micro, Small, and Medium Enterprises (MSMEs) sector. As an integral part of the economy, this pandemic has significantly affected MSMEs. MSMEs face various challenges due to the COVID-19 pandemic, such as declining sales, limited capital, distribution constraints, difficulty accessing raw materials, decreased production, and layoffs. These impacts have raised concerns among various stakeholders involved in the MSME ecosystem (Arianto, 2020; Hajati, 2021; Wiyono et al., 2020).Furthermore, this pandemic also directly impacts the purchasing power of the society, but indirectly, it has also increased internet usage in Indonesia. Many people have been engaging in activities from home, such as working or studying remotely and shopping online. This has triggered an increased demand for internet access and has affected consumer behaviour when making purchases or transactions (Wiyono et al.,2020).

The impact of this situation is evident in the direct decline in people's purchasing power. However, indirectly, this situation also influences the increased use of the Internet among the Indonesian population. This is due to activities carried out from home, remotely, and others that require internet access, including consumer behaviour when making purchases or transactions.Current data indicates that internet usage in Indonesia continues to experience significant growth. According to the latest report, the number of internet users in Indonesia has reached a particular figure during a specific period of time. However, these exact figures may change as time goes on and internet penetration increases nationwide. This data provides an overview of how much the Indonesian population relies on internet access in daily activities.

Figure 1
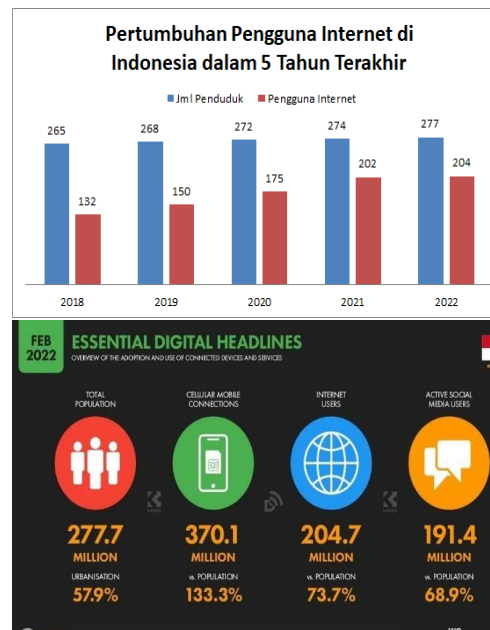
Based on the available data, it can be observed that the number of internet users in Indonesia reached 205 million in January 2022. This figure indicates that approximately 73.7% of the total population of Indonesia are Internet users. There has been a 1% increase compared to the same period in the previous year. In January 2021, there were recorded 203 million internet users in Indonesia. These data demonstrate that the number of internet users in Indonesia grows yearly. The total population of Indonesia is 277.7 million (2021: 274.9 million, an increase of 1%). The number of connected mobile devices is 370.1 million (2021: 345.3 million, an increase of 3.6%). The number of internet users is 204.7 million (2021: 202.6 million, an increase of 1%). The number of active social media users is 191.4 million (2021: 170 million, an increase of 12.6%) (We Are Social, 2022). GlobalWebIndex has also surveyed people's activities more frequently in twenty countries during the COVID-19 pandemic. The survey results indicate that 46% of respondents shop online more often. This change in consumer behaviour has become a concern for businesses, particularly for UMKM in Indonesia, due to the shift towards online purchasing due to the pandemic. The shift in consumer purchasing patterns from offline to online is driven not only by the Covid-19 pandemic but also by the convenience and ease of online shopping. Consumers find buying goods or services online more practical and can facilitate their needs. As a result, they are becoming more accustomed to engaging in online purchases. This change demands that businesses, including UMKM, adapt to this trend and optimise their presence in the digital world. Developing easily accessible online platforms and providing a satisfying shopping experience for consumers is key to maintaining and increasing market share in the digital era.

Figure 2
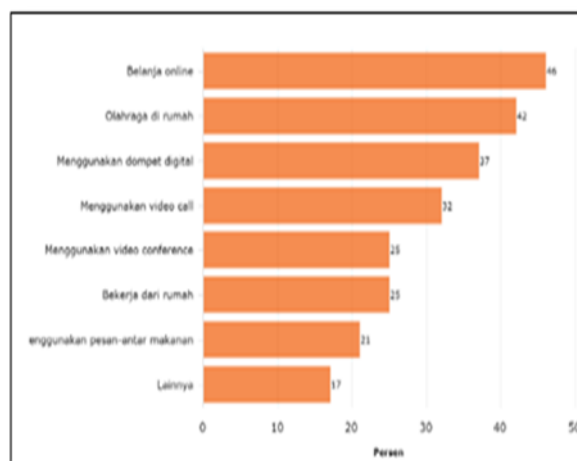
The changes in consumer behaviour in purchasing and consuming goods or services can be seen as a result of several factors. Firstly, the Covid-19 pandemic has significantly influenced consumer behaviour patterns. These changes are also related to the ongoing development of the Fourth Industrial Revolution or the digital era today. In this era, almost every aspect of life has been digitised, including in the field of economy. In the context of the economy, the concept of the digital economy has emerged, referring to economic activities that rely on and utilise Internet technology. Around 60% of Indonesia's population (approximately 130 million) have internet connectivity. This creates opportunities for UMKM if they can master digital literacy and adapt to these changes. Business actors, especially those involved in Micro, Small, and Medium Enterprises (UMKM), must adapt to these conditions and develop strategies that allow them to survive and thrive. One necessary strategy is digital transformation, where UMKM leverage digital technology to enhance operations, expand market reach, and improve business efficiency (Arianto, 2020; Setiyani, 2020; Wijoyo et al., 2020). Digital transformation refers to changes within an organisation or business entity in response to advancements in digital technology. This transformation involves digital technology to modify existing processes, structures, and organisational work culture. Digital transformation encompasses adopting and integrating various digital technologies, such as cloud computing, big data analytics, artificial intelligence (AI), the Internet of Things (IoT), and automation. The main objective of digital transformation is to enhance operational performance, efficiency, innovation, and customer experience.

In the business context, digital transformation can involve changes in business models, marketing strategies, customer

interactions, supply chain management, and internal operations. This enables companies to adapt to market trends, improve efficiency, enhance customer experiences, and develop innovative new products or services (Westerman et al., 2014; Ross et al., 2018; McAfee et al., 2017; Bhaskaran, 2020; Accenture, 2019). Digital transformation also impacts cultural and mindset shifts within organisations. Organisations that adopt digital transformation need to foster a mindset that embraces change, encourages cross-departmental collaboration, promotes innovative thinking, and leverages data as a foundation for decision-making. Implementing digital transformation is not limited to large companies but is also relevant to Micro, Small, and Medium Enterprises (MSMEs). MSMEs can leverage digital technology to enhance operations, improve visibility and market access, optimise online marketing, and enhance customer interactions. In the evolving digital era, digital transformation is necessary for organisations that want to remain relevant, competitive, and sustainable. Implementing digital transformation requires commitment and investment in technology infrastructure, skilled human resources, and the right strategies to harness the full potential of digital technology (Berman et al., 2020; Chaffey & Smith, 2017; Laudon & Laudon, 2020; Ray & Ray, 2019). Digital transformation is an ongoing journey following technological advancements and changing market needs. Organisations that succeed in digital transformation possess flexibility, adaptability, and the ability to innovate continuously to seize the opportunities offered by the digital era. According to the World Economic Forum (2019), Deloitte (2020), and McKinsey & Company (2019), in the era of digital 4.0, there is a significant potential for positive impact if businesses, especially MSMEs, can manage and adapt well. The digital 4.0 era is characterised by technological advancements, including artificial intelligence, the Internet of Things (IoT), big data analytics, and cloud computing. In the context of this research, it opens opportunities for MSMEs to expand their market reach in relation to market expansion in digital transformation. MSMEs can reach potential customers in broader regions, even globally, by utilising digital platforms such as websites, social media, or online marketplaces. This enables them to enhance visibility and increase their market share. Digital technology can help MSMEs improve their operational efficiency. Software and automation tools can assist in automating business processes, reducing human errors, and optimising resource utilisation. This can result in significant time and cost efficiencies. MSMEs have opportunities to develop innovative products and services in the digital era. By leveraging digital technologies such as data analytics and artificial intelligence, MSMEs can gain insights into customer needs and market trends, which can be used to create relevant and appealing products and services. Digital technology enables MSMEs to build closer relationships with their customers. MSMEs can interact directly with customers, listen to feedback, and provide more personalised customer service through social media, email, or online chat. Thus, MSMEs that can manage and adapt well in the digital 4.0 era can potentially create a competitive advantage. By leveraging the right technologies, MSMEs can offer unique customer experiences, improve operational efficiency, and compete with larger companies. In the digital 4.0 era, there is significant potential for positive impact if businesses, especially MSMEs, can manage and adapt well. Digital technology has become a key driver of business growth and success in this era.

Previous studies on enhancing the competitiveness of MSMEs through creativity and innovation in the digital era have examined the relationship between digital transformation, creativity, innovation, and competitive advantage of MSMEs in Indonesia. The results show that digital transformation positively contributes to MSMEs' creativity, innovation, and competitive advantage. They also highlight the positive and significant impact of creativity and innovation on the business performance of MSMEs in Indonesia (Aryanto & Wibowo, 2020; Saragih et al., 2018; Hapsari & Wulandari, 2020; Mahmoud, 2020). Another study examines the influence of digital entrepreneurship and innovation on the performance of MSMEs in Indonesia. The findings indicate that digital entrepreneurship and innovation positively influence the performance of MSMEs, including enhancing competitiveness. Additionally, research has explored the impact of e-commerce on the performance of small businesses, including MSMEs. The results reveal a significant association between the use of e-commerce and improved business performance, including increased competitiveness. These studies provide valuable insights into enhancing the competitiveness of MSMEs through creativity and innovation in the digital era.

Creativity as the Key to Competitive Advantage in Simping MSMEs in Purwakarta can improve competitiveness by developing unique creative ideas in products, services, or business processes. Through creative initiatives, MSMEs can differentiate themselves from competitors and attract the attention of a digitally connected market. Therefore, innovation is needed as a Solution to Business Challenges in facing the changes and challenges of the digital era. Simply, MSMEs need to adopt innovation to strengthen their position. Innovation can involve using digital technology, such as mobile applications, e-commerce platforms, or intelligent digital marketing strategies, enabling MSMEs to achieve efficiency, enhance visibility, and optimise the customer experience. Therefore, Adaptation to Changing Consumer Behavior in the digital era is necessary as it has transformed consumer behaviour, including their needs and preferences. MSMEs need to leverage creativity and innovation to understand and anticipate these changes. By adjusting their products, services, and customer experiences, MSMEs can provide relevant added value and gain customer trust in the digital business environment. Collaboration and Digital Networking for Simping MSMEs in Purwakarta can harness the benefits of networking and collaboration in the digital era. Through partnerships with other businesses, online platforms, or business communities, MSMEs can expand their reach, support each other in facing shared challenges, and share knowledge and resources to achieve better growth. Simping MSME actors in

Purwakarta have recognised the importance of digital-based business development to survive and compete in the advancing era of the fourth industrial revolution. They are aware that failure to adaptto these changes puts them at risk of being leftbehind and replaced by competitors who leverage digital technology more effectively.

Therefore, Simping MSME actors strive to continuously develop their businesses by harnessing digital technology.

By adopting a digital-based approach, Simping MSME actors can expand their market reach, enhance operational efficiency, and provide a better experience to their customers. Through social media, e-commerce platforms, or mobile applications, they can reach potential customers beyond their geographic region and establish closer connections with consumers. Additionally, digital technology enables MSMEs to optimise their business processes, reduce operational costs, and increase productivity. (Ahmad, S.N., & Yasin, N.M., 2019; Pradana, R.A., & Rachmawan, A.H., 2021; Suksmanto, R.,& Fitriyani, N.L., 2020).

Furthermore, digital-based business development also presents opportunities for Simping MSMEs to innovate their products and services. By leveraging digital technology, they can explore market needs, identify new opportunities, and deliver creative and innovative solutions. This will help them differentiate themselves from competitors and create added customer value.

It is crucial for Simping MSME actors in Purwakarta to continuously learn and develop skills in utilising digital technology. They can participate in training programs, access online resources, or join similar business communities to exchange knowledge and experiences. By doing so, they can strengthen their position in the market and face increasing competition in the fourth industrial revolution era.

Figure 3 shows that the level of digital-based business development among the 30 respondents sampled in the pre-research phase is relatively low. The results are as follows: Of the 30 Simping MSMEs in Purwakarta, 60% have not yet embarked on digital-based business development, while 40% have already done so.

GAMBAR 3
HASIL PRA PENELITIAN UMKM SIMPING
YANG MELAKUKAN PENGEMBANGAN USAHA
BERBASIS DIGITAL
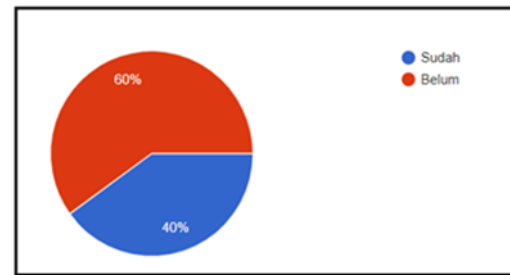
GAMBAR 4
HASIL PRA PENELITIAN UMKM SIMPING
YANG TELAH MELAKUKAN INOVASI DAN
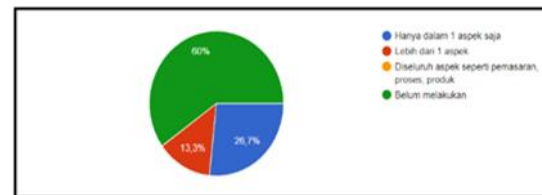KREATIVITAS DALAM PENGEMBANGAN
USAHA BERBASIS DIGITAL

Figure 4 shows that among the pre-research sample consisting of 30 Simping MSMEs, 36.7% of them have engaged in digital-based business development in the marketing field. Additionally, 16.7% of the MSMEs have undertaken digital-based business development in the product field, while 3.3% have done so in the distribution field.

Human resources are essential assets in driving and advancing human life. Through continuous development and discoveries, humans can create progress in various fields, including knowledge and technology. In this regard, creativity and innovation play a crucial role. Creativity refers to the human ability to generate new ideas, perceive problems from different perspectives, and provide unique solutions. It involves imagination, the courage to think outside the box, and the ability to identify opportunities amidst challenges. Creativity motivates humans to create something new in products, services, or business processes.

Meanwhile, innovation is the implementation of creative ideas into tangible actions. Innovation involves the development and application of new ideas to create added value. This can take adopting new technologies, improving products, updating business processes, or introducing new business models. Innovation is crucial in accelerating human progress and enhancing competitiveness in an ever-evolving era. Creativity and innovation are interconnected and complementary. Without creativity, generating new ideas that can be implemented is challenging. On the other hand, without innovation, creative ideas will remain mere fantasies without impacting development and progress.

In human resources, it is crucial to encourage and develop creativity and innovation. This can be achieved through education, training, and an organisational culture that supports the development of new ideas. Individuals with strong creative and innovative abilities can become key drivers in creating positive change and adding value to society and organisations. (Nonaka, I., & Takeuchi, H. (1995); Sternberg, R. J., & Lubart, T. I. (1999); Lena Nuryanti et al., 2016; Aprodita, 2018; Sucahyawati, 2019; Rosmadi, 2021).

Creativity and innovation are interconnected concepts that can be seen as unified. Creativity generates new ideas, sees problems from different perspectives, and thinks beyond conventional boundaries. On the other hand, innovation is implementing these creative ideas into tangible actions that result in positive change.

Creativity and innovation complement each other because, without creativity, there would be no new ideas to implement. Creative ideas serve as the fuel for innovation. Conversely, innovation requires creativity to generate new and different ideas from what already exists. Creativity and innovation also work hand in hand in an ongoing cycle. Creativity fuels the emergence of new ideas that are then implemented through innovation. When innovation occurs, it can generate feedback

that, in turn, stimulates creativity to create even better innovations

In business, creativity and innovation are crucial to creating a competitive advantage. SMEs that combine creativity and innovation in their business strategies can generate unique products or services, meet consumer needs in new ways, and deliver significant added value. This enables SMEs to differentiate themselves from competitors and capture a larger market share. To foster creativity and innovation, organisations must create a culture that supports exploring new ideas, provides freedom for employees to think creatively, and encourages collaboration and diverse opinions. Investing in training and developing creativity and innovation skills is also important to optimise the potential of individuals and teams in creating innovative solutions.

Creativity and innovation have become increasingly important in the rapidly evolving digital era. Technological advancements provide new opportunities to create better solutions, solve complex problems, and capitalise on emerging business opportunities. Therefore, SMEs that can integrate creativity and innovation into their business strategies will have a solid competitive advantage in the ever-changing digital era.

By formulating the research problem, a more in-depth understanding of how UMKM Simping in Purwakarta can enhance its competitiveness through creativity and innovation in the digital era can be gained. The research question is: How can creativity and innovation enhance the competitiveness of UMKM Simping in Purwakarta in the digital era?

FIGURE 5: Research Paradigm
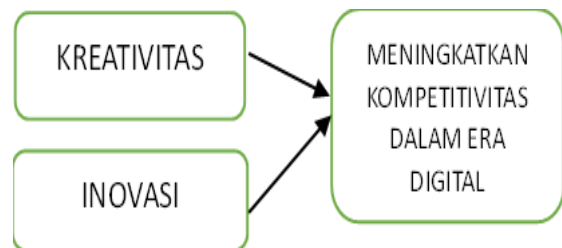
RESEARCH METHOD

This study investigates the influence of creativity and innovation on competitiveness in the digital era in the Simping UMKM centre in Purwakarta. The study involves two types of variables: exogenous variables and endogenous variables. The exogenous variables include creativity (X1), which consists of person, process, product, and press dimensions. Meanwhile, the innovation variable (X2) comprises product, process, and market innovation dimensions. The endogenous variable in this study is competitiveness in the digital era (Y), which encompasses product quality, product capacity, digital literacy, and digital marketing.

The study was conducted for less than one year, from November 2022 to January 2023. The method used in this study is a cross-sectional study, where data collection is conducted only once within a specific time frame. This approach was chosen to gather representative data at a particular time.

This research is expected to gain a deeper understanding of the influence of creativity and innovation on improving the competitiveness of UMKM in the digital era in the Simping UMKM centre in Purwakarta. The findings of this study can provide insights and recommendations for UMKM practitioners to enhance their competitiveness in the face of the digital era. The reference used in this research is Sastroasmoro (2015), which recommends using the cross-sectional study method.

In this study, the respondents are UMKM in the Simping area of Purwakarta. This research adopts the descriptive-verification research design, which aims to collect data in the field to provide a more detailed description of the phenomenon being studied. Therefore, the research method used is the explanatory survey method.

The explanatory survey method collects information through questionnaires administered to a portion of the target population. The goal is to obtain the opinions and perceptions of the respondents regarding the research topic being examined. In this study, the researcher utilised a questionnaire to collect data from UMKM in the Simping area of Purwakarta.

This research uses the multiple regression analysis technique to analyse the collected data. Multiple regression is used to test the influence of the independent variables, namely creativity and innovation, on the dependent variable, namely improving the competitiveness of UMKM in the digital era in the Simping UMKM centre in Purwakarta. Using this method, the researcher can identify the relationship and statistical significance between the investigated variables.

This research method is expected to gain a deeper understanding of the influence of creativity and innovation on the development of digital-based businesses in UMKM Simping in Purwakarta. The results of the multiple regression analysis will provide valuable insights for UMKM practitioners in enhancing their competitiveness through creativity and innovation in the digital era.

1. Normality Test

The normality test is a statistical method used to determine whether the data used in a study follows a normal distribution or not. The normality test aims to ensure that the data used meets the basic assumptions of several statistical analyses. In this study, the normality test was conducted using the Kolmogorov-Smirnov formula. This method compares the observed data distribution with the expected normal distribution. This testing can determine how closely the data approximates a normal distribution. The SPSS software version 25.0 for Windows can be used to perform the normality test more efficiently. With the use of this software, researchers can input the data to be tested for

normality and perform the analysis according to the Kolmogorov-Smirnov formula.

The normality test results will be evaluated by examining the significance value (p-value) generated. The data is considered normal distribution if the p-value is more significant than the predetermined significance level (e.g., 0.05). However, if the p-value is smaller than the predetermined significance level, then the data is considered not to have anormal distribution.

By conducting a normality test, researchers can ensure that the data used in statistical analysis follows an appropriate distribution. This is important to ensure the accuracy and validity of the analysis results.

Tabel 1. Uji Normalitas

One-Sample Kolmogorov-Smirnov Test		Unstandardi zed Residual
N		42
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.54889990
Most Extreme Differences	Absolute	.077
	Positive	.077
	Negative	-.059
Test Statistic		.077
Asymp. Sig. (2-tailed)		.200[c,d]

Based on the table above, it can be stated that the significance value of the normality test for the research data is 0.200. This value is larger than the predetermined significance level of
0.05. Therefore, it can be concluded that the data of the research variables have a normally distributed spread. When the significance value exceeds the predetermined significance level, the data fits well with the normal distribution. This means that the data follows the expected pattern of anormal distribution.

1. Linearity Test

The next step in this research is to test the linearity of the relationship between the variables of creativity and innovation in digital business development. The linearity test examines whether the relationship

between these two variables is linear. Researchers can also use statistical tests such as correlation tests. Correlation tests, such as Pearson's correlation, can measure the strength and direction of the relationship between the two variables. If the correlation coefficient value approaches 1 or -1, it can be said that the relationship between the two variables tends to be linear. In this study, after conducting the linearity test, researchers will be able to determine whether there is a linear relationship between the variables of creativity and innovation with the improvement of competitiveness of SMEs in the digital era. If there is a significant linear relationship, researchers can proceed with multiple regression analysis to examine the influence of the variables of creativity and innovation on the improvement of competitiveness of SMEs in the digital era.

Tabel 2. Uji Linearitas Kreativita*s*

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Unstandardized Residual * Unstandardized Predicted Value	Between Groups	(Combined)	337.741	18	18.763	2.151	.042
		Linearity	.000	1	.000	.000	1.000
		Deviation from Linearity	337.741	17	19.867	2.277	.034
	Within Groups		200.650	23	8.724		
	Total		538.391	41			

Based on the table above, it can be seen that the Sig.Linearity value is 1.000. In the context of linearity testing, this value indicates the significance of the linear relationship between the variables of creativity and the improvement of competitiveness of SMEs in the Digital Era in Simping SMEs in Purwakarta. If the Sig.Linearity value is more significant than 0.05. It can be concluded that there is a significant linear relationship between the variable of creativity and business development. In this case, the Sig.Linearity value of 1.000, which is greater than 0.05, indicates a significant linear relationship between creativity and the

improvement of competitiveness of SMEs in the Digital Era in Simping SMEs in Purwakarta. This indicates that a higher level of creativity in Simping SMEs in Purwakarta is significantly associated with increased business development. In this context, creativity can be an important factor contributing to SMEs progress and success in developing their businesses in the digital era. Linearity testing was also conducted on the innovation variable concerning digital business development. The results can be observed in the following table.

Tabel 3. Uji Linearitas Inovasi

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Unstandardized Residual * Unstandardized Predicted Value	Between Groups	(Combined)	484.323	12	40.360	1.003	.470
		Linearity	.000	1	.000	.000	1.000
		Deviation from Linearity	484.323	11	44.029	1.094	.400
	Within Groups		1166.750	29	40.233		
	Total		1651.073	41			

Innovation remains a crucial factor in enhancing competitiveness, meeting the evolving market demands, and creating added value for SMEs in the digital era. Based on the significance value of 1.000 obtained from the linearity test between innovation and Enhancing Competitiveness of Simping SMEs in Purwakarta, it can be concluded that there is a significant linear relationship between innovation and Enhancing Competitiveness of Simping SMEs in Purwakarta.

Heteroskedasticity Test In the context of this study, the heteroskedasticity test is conducted to identify whether there is an inequality in the variation of residuals between different observations in the regression model. Residuals represent the difference between the predicted values by the regression model and the actual values.

A scatterplot graph is one of the methods used to test heteroskedasticity in regression

analysis. In the scatterplot, the observed data points from the independent variable (X) and the dependent variable (Y) are plotted on a scattered diagram. Suppose no specific patterns are observed in the scatterplot, and the data points are randomly distributed without forming any distinctive patterns like a cone or a fan-shaped pattern. In that case, it can be concluded that the regression model does not experience heteroskedasticity or meet the homoscedasticity assumption.

In the described case, the scatterplot shows that the data points are scattered above and below the zero mark on the Y-axis, and there is no data clustering on only one side. This indicates the absence of specific patterns that would suggest the presence of heteroskedasticity in the regression model. In addition to the scatterplot, the Glejser method can also be used to test heteroskedasticity. This method involves regressing the absolute residuals (prediction errors) value against the independent variable. If the significance value between the independent variable and the absolute value of residuals is greater than 0.05, it indicates the absence of heteroskedasticity. Heteroskedasticity tests using multiple methods are conducted to obtain a more accurate conclusion about the presence of heteroskedasticity in the regression model.

Below is the output of the heteroskedasticity test using the Glejser method, as shown in the following table.

Tabel 5. Uji Heteroskedastisitas Dengan Metode Glejser

Coefficients^a

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.286E-14	14.817		.000	1.000
	Kreativitas	.000	.093	.000	.000	1.000
	Inovasi	.000	.217	.000	.000	1.000

a. Dependent Variable: Abs_res

Therefore, based on the presented table, it can be observed that the variables of creativity and innovation have a significance value of 1.00. If the significance value is greater than 0.05, it indicates no significant relationship between these variables and other variables in the context of the conducted analysis.

In statistical research, the significance level (p-value) measures the statistical significance of the relationship between variables. Generally, if the p-value is smaller than the predetermined significance level(usually 0.05), the relationship between variables is considered statistically significant.

The multicollinearity test is used to identify whether there is a significant correlation among the independent variables in the regression model. The purpose of this test is to ensure that the independent variables used in the regression analysis are not significantly correlated with each other.

When multicollinearity is present, it indicates a strong linear relationship between two or more independent variables in the regression model. This can lead to several issues in interpreting regression results, such as unstable coefficients, difficulty in identifying the unique contribution of each independent variable, and challenges in making accurate predictions.

In the multicollinearity test, several commonly used methods exist, such as Variance Inflation Factor (VIF), Tolerance, and Condition Index. These methods measure the correlation level among the regression model's independent variables. If the VIF value is high (usually above 10) or the tolerance value is low (usually below 0.1), it may indicate the presence of multicollinearity.

Several steps can be taken if the multicollinearity test results indicate significant multicollinearity. These include data transformation, removing variables with high correlation, or combining variables with high correlation into a new variable. The goal is to eliminate or

reduce the correlation among the independent variables in the regression model.

Tabel 6. Uji Multikolinearitas

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	3.326	14.817		.225	.824		
	Kreativitas	.860	.093	.817	9.257	.000	.736	1.359
	Inovasi	.280	.217	.114	1.289	.205	.736	1.359

a. Dependent Variable: Pengembangan Usaha

Based on the table above, it can be observed that the VIF values for creativity and innovation are 1.359 each. These VIF values are significantly lower than 10.00. This indicates that no significant multicollinearity exists between the variables of creativity and innovation in the regression model.

In regression analysis, multicollinearity occurs when a high correlation exists between two or more independent variables. This can cause issues interpreting regression results, such as unstable or unreliable regression coefficients.

However, with VIF values for creativity and innovation below 10.00, it can be concluded that there is no multicollinearity issue in the regression model. This means that the variables of creativity and innovation are independent and do not exhibit a high correlation.

Therefore, the regression analysis results in this model can be interpreted more accurately and relied upon without the interference of multicollinearity effects.

Verificative Analysis Using Multiple Linear Regression To obtain the regression coefficient results in the multiple linear regression equation model, the SPSS 26.0 for Windows program is used. The regression coefficients will provide information about the extent of the influence of independent variables (X1 and X2) on the dependent variable (Y) in the regression model.

The resulting regression coefficients will indicate the magnitude of the average change in the dependent variable (Y) when there is a one-unit change in the independent variable (X1 or X2) while keeping the values of other variables constant.

The obtained regression coefficients will provide information about the direction and strength of the influence of the independent variables on the dependent variable. Positive regression coefficients indicate a positive relationship between the independent and dependent variables, while negative regression coefficients indicate a negative relationship between the independent and dependent variables. The magnitude of the regression coefficients will also indicate the extent of the influence of the independent variables on the dependent variable.

Using the SPSS 26.0 for Windows program, the regression coefficient results can be interpreted to conclude this study.

The multiple linear regression equation model that will be established in this study is as follows: Y = a + b1X1 + b2X2 (Sugiyono, 2014, p. 277)

The regression coefficient results with the assistance of SPSS 26.0 for the Windows program can provide the following results: Table 7. Regression Coefficients of Creativity and Innovation on Digital Business Development.

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.326	14.817		.225	.824
Kreativitas	.860	.093	.817	9.257	.000
Inovasi	.280	.217	.114	1.289	.205
a. Dependent Variable: Pengembangan Usaha					

Based on the above output, the constant and regression coefficients can be obtained, and the multiple linear regression equation can be formed as follows: Y = a + b1X1 + b2X2 Y = 3.326 + 0.860X1 + 0.280X2

The equation provided gives insights into the value of the constant (a), the regression coefficient of creativity (b1), and the regression coefficient of innovation (b2) in the regression model. The value of a indicates the value of digital business development (Y) when both independent variables (X1 and X2) are zero (0).

The regression coefficient of X1 (b1) indicates a positive relationship between creativity (X1) and digital business development (Y). The value of 0.860 suggests that if creativity increases by one unit while holding other variables constant, digital business development will increase by 0.860.

Similarly, the regression coefficient of X2 (b2) also shows a positive relationship between innovation (X2) and improving the competitiveness of UMKM in the digital era in UMKM Simping, Purwakarta (Y). The value of
0.280 indicates that if innovation increases by one unit while other variables are held constant, digital business development will increase by 0.280. Thus, this insight implies that creativity and innovation significantly positively influence the competitiveness of UMKM in the digital era in UMKM Simping, Purwakarta. The higher the level of creativity and innovation, the higher the potential for digital business development

.

The coefficient of determination is used to express the magnitude of the contribution of variable X to Y, thereby indicating the percentage of influence of variable X on Y. The coefficient of determination can be calculated using the formula proposed by Sugiyono (2014:257) as follows: $R^2 = r^2 \times 100\%$. Insights provided regarding the coefficient of determination (R^2) are as follows. The coefficient of determination measures the extent of the contribution of independent variable X to dependent variable Y in the regression model. In this case, R^2 represents the percentage of influence of variable X on variable Y. The formula used to calculate the coefficient of determination is $R^2 = r^2 \times 100\%$, where r is

the correlation coefficient between variable X and variable Y. The correlation coefficient (r) ranges from -1 to 1, and R^2 represents the percentage of variation in Y that can be explained by the variation in X in the regression model. Suppose the coefficient of determination (R^2) is obtained as 0.75. In that case, it can be said that 75% of the variation or changes in variable Y can be explained by the variation or changes in variable X in the regression model. This indicates that variable X provides a significant contribution to variable Y. The coefficient of determination is an important indicator to measure the fit or accuracy of the regression model in explaining the relationship between independent variables and the dependent variable. The higher the value of R^2, the greater the influence of variable X on variable Y in the regression model.

The Influence of Creativity on Enhancing the Competitiveness of SMEs in the Digital Era is presented in the following table.

Table 8. Coefficient of Determination: The Influence of Creativity on Enhancing the Competitiveness of SMEs in the Digital Era

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876[a]	.767	.761	3.669

a. Predictors: (Constant), Kreativitas
b. Dependent Variable: Pengembangan Usaha

Table 8. Coefficient of Determination: The Influence of Creativity on Enhancing the Competitiveness of SMEs in the Digital Era

$KD = r^2 \times 100\% = (0.876)^2 \times 100\% = 76.7\%$

Based on the above table, the correlation coefficient (R) is 0.876. Meanwhile, the calculated value of KD is 76.7%, indicating that creativity has a partial influence of 76.7% on enhancing the competitiveness of SMEs in the digital era in Simping Purwakarta, while the remaining 23.3% is influenced by other factors not examined in this study.

2. The influence of innovation on enhancing the competitiveness of digital-based SMEs can be observed through the following table.

Table 9. Coefficient of Determination: The Influence of Innovation on Enhancing the Competitiveness of SMEs in the Digital Era

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.534ᵃ	.285	.267	6.425

a. Predictors: (Constant), Inovasi

b. Dependent Variable: Pengembangan Usaha

KD = r2 x 100%

= $(0,534)^2$ x 100% = 28,5%

Based on the table, it can be observed that the correlation coefficient (R) between the variables of creativity and innovation with the enhancement of digital-based SMEs' competitiveness is 0.534. The coefficient of determination (KD) obtained from the calculation is 28.5%.

The coefficient of determination (KD) indicates the percentage of variation or influence of the independent variables (creativity and innovation) on the dependent variable (enhancement of digital-based SMEs' competitiveness). In this case, the KD value of 28.5% indicates that innovation partially contributes 28.5% to enhancing digital-based SMEs' competitiveness in Simping Purwakarta. This means that changes in the innovation variable can explain approximately 28.5% of the variation or changes in digital business development. The remaining 71.5% is influenced by other factors not examined in this study.

It is important to note that a higher KD value indicates a stronger relationship between the independent and dependent variables. However, in the context of this research, although the influence of innovation on enhancing   digital-based   SMEs'

competitiveness does not reach 100%. There is still a significant impact of innovation on digital business development.

Simultaneous Hypothesis Testing (T-Test)

Research Hypothesis: Null Hypothesis (H0): There is no significant influence between creativity and innovation on developing digital-based businesses in Simping SMEs in Purwakarta. Alternative Hypothesis (H1): There is a significant influence between creativity and innovation on developing digital-based businesses in Simping SMEs in Purwakarta.

These hypotheses are based on the understanding that creativity and innovation play a crucial role in enhancing the competitiveness of SMEs in the digital era. Assuming that Simping SMEs in Purwakarta also face increasing competition challenges, this research aims to determine whether creativity and innovation can be important factors in enhancing the competitiveness of these SMEs through digital business development. These hypotheses will be tested using data collected from Simping SMEs in Purwakarta by analysing the relationship between the variables of creativity and innovation with the development of digital-based businesses. The results of the hypothesis testing will provide information on whether there is a significant relationship between creativity, innovation, and digital business development, thereby providing a better understanding of the factors contributing to enhancing SMEs' competitiveness in the digital era.

The t-test statistical analysis is used in this study to measure the extent to which individual independent variables influence the dependent variable. In this research, the testing is conducted on the influence of creativity on digital business development and innovation's influence on enhancing SMEs' competitiveness in the digital era.

T-Test in Statistical Analysis

In the t-test, hypothesis testing is conducted to examine the null hypothesis, which states that there is no significant influence between the independent variables (creativity and innovation) and the dependent variables (digital business development and SMEs' competitiveness). The alternative hypothesis states that there is a significant influence between the independent variables and the dependent variables.

The SPSS 25.0 for Windows program is used to perform statistical analysis on the data collected in this study. By using SPSS, more efficient and accurate statistical calculations and tests can be conducted. The testing will yield a t-statistic value, which can be used to determine the significance of the influence of the independent variables on the dependent variables.

The t-test results will provide information about the extent of the influence of the independent variables (creativity and innovation) on the dependent variable (Enhancing SMEs' Competitiveness in the Digital Era). Suppose the t-statistic value shows significance lower than the predetermined significance level (usually $\alpha = 0.05$). In that case, it can be concluded that there is a significant influence between the independent variables and the dependent variable.

Therefore, the t-test and the use of SPSS 25.0 for Windows in this study will provide a deeper understanding of the extent to which creativity and innovation influence the enhancement of SMEs' competitiveness in the digital era. The analysis results can serve as a basis for decision-making and strategy formulation to improve SMEs' digital competitiveness.

The following is the t-test output, which can be seen in the table below

Table 10. T Test Significance Value

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.326	14.817		.225	.824
Kreativitas	.860	.093	.817	9.257	.000
Inovasi	.280	.217	.114	1.289	.205

a. Dependent Variable: Pengembangan Usaha

Based on the table above, creativity (X1) has a t-value of 9.257, which is greater than the critical t-value of 2.021, with a probability value (Sig) of 0.000 ≤ 0.05. Therefore, this variable is considered to significantly influence the variable "Enhancing Digital Era Competitiveness of SMEs" (Y). On the other hand, innovation (X2) has a t-value of 1.289, which is less than the critical t-value of 2.021, with a probability value (Sig) of 0.205 > 0.05. Thus, this variable is considered to have no significant influence on the variable "Digital- Based Business Development" (Y).

References

1. Acs, Z. J., & Szerb, L. (2009). The global entrepreneurship index (GEINDEX). Foundations and Trends® in Entrepreneurship,5(5), 341-435.

2. Ahmad, S. N., & Yasin, N. M. (2019). Factors Affecting the Adoption of E-commerce Among Small and Medium Enterprises in Malaysia. Journal of Technology Management and Business, 6(2), 21-33.

3. Amabile, T. M. (1996). Creativity in context: Update to the social psychology of creativity. Westview Press.

4. Angkat, D., & Nawawi, A. H. (2022). The Influence of Innovation on Competitive Advantage and Performance of SMEs in Indonesia. International Journal of Scientific & Technology Research, 11(2), 1591-1598.

5. Applegate, L. M., Austin, R. D., & Soule, D. L. (2009). Corporate Information Strategy and Management: Text and Cases. McGraw-Hill Education.

6. Arianto. (2020). Pandemi Covid-19 dan Implikasinya terhadap Perekonomian Dunia. Jurnal Kajian Ekonomi, 4(2), 99-113.

7. Bambang Agus Windusancono. (2021). Peranan Usaha Mikro Kecil dan Menengah (UMKM) dalam Pertumbuhan Ekonomi di Indonesia. Jurnal Bisnis dan Ekonomi, 28(2), 1-10.

8. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.

9. Berman, S. J., & Marshall, A. (2020). Creating Digital: Technology, Design, and the Practice of Architecture. Princeton University Press.

10. Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. WW Norton & Company.

11. Burke, W. W. (2017). Organisation change: Theory and practice. Sage Publications.

technology-media-and-
telecommunications/topics/digital-transformation.html

Dewi, R. K., Rahayu, R., & Parwati, N. K. A. (2018). The Effect of Entrepreneurship Orientation and Innovation Capability on Competitive Advantage and Its Implication on Business Performance. Journal of Business and Management, 20(1), 12-19.

Farhani, F., Rahman, M., Rahardja, S., & Helmi,
A. (2021). The Role of Digital Transformation on Business Performance in Micro, Small, and Medium Enterprises (MSMEs) During Covid-19 Pandemic. Journal of Internet Social Networking and Virtual Communities, 2021, 1-9.

GlobalWebIndex. (2021). Coronavirus Research, Data & Insights. Diakses pada 9 Juni 2023,   dari https://www.globalwebindex.com/reports/coronavirus

Gujarati, D. N., & Porter, D. C. (2009). Basic Econometrics (5th ed.). McGraw-Hill Education.

Hadiyanto, H., & Hendrawan, D. (2019). Model Peningkatan Daya Saing UMKM Melalui Inovasi Berbasis Digital di Kabupaten Purwakarta. Jurnal Ekonomi Kuantitatif Terapan, 12(1), 27-
37.

Hajati, E. (2021). Dampak Pandemi Covid-19 Terhadap Usaha Mikro Kecil dan Menengah (UMKM) di Indonesia. Jurnal Ekonomi Kuantitatif Terapan, 14(1), 21-34.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson,
R. E. (2014). Multivariate Data Analysis (7th ed.). Pearson Education.

Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2017). Entrepreneurship (10th ed.). McGraw- Hill Education.

Keller, G. (2014). Statistics for Management and Economics (10th ed.). Cengage Learning.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. Harvard Business Review, 73(2), 59-67.

Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li,
W. (2005). Applied Linear Statistical Models(5th ed.). McGraw-Hill Education

Laudon, K. C., & Laudon, J. P. (2020). Management Information Systems: Managing the Digital Firm. Pearson Education Limited

Ludiya, C., & Mulyana, A. (2020). The Influence of Entrepreneurship, Creativity and Innovation on the Competitive Advantage and Business Performance of SMEs in Indonesia. Journal of Business and Retail Management Research, 15(1), 187-198.

McKinsey & Company. (2021). Digital Transformation. Diakses pada 9 Juni 2023, dari https://www.mckinsey.com/business- functions/mckinsey-digital/our- insights/digital-transformation

Nambisan, S., & Baron, R. A. (2019). Entrepreneurship in Innovation Ecosystems: Entrepreneurs' Self-Regulatory Processes and Their Implications for New Venture Success. Journal of Business Venturing, 34(4), 589-606

Nuryanti, S., Hasyim, S., Ramli, R., & Rahmat, R. (2020). Mediating Role of Innovation Capability on The Effect of Entrepreneurship Orientation and Market Orientation Towards Competitive Advantage. Journal of Entrepreneurship Education, 23(3), 1-11.

Nonaka, I., & Takeuchi, H. (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford University Press.

Osterwalder, A., & Pigneur, Y. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. John Wiley & Sons.

Patel, P. C., & Fiedler, M. (2018). Examining the Relationships among Technological Innovation, Entrepreneurial Orientation, and Firm Performance: Evidence from Manufacturing

SMEs. International Entrepreneurship and Management Journal, 14(4), 1045-1063.

Putra RP. (2020). Kinerja Investasi dalam Pertumbuhan Ekonomi Indonesia. Jurnal Akuntansi Multiparadigma, 11(2), 314-327.

Pollact, R. (2012). Business Development in Entrepreneurship. Journal of Management Policy and Practice, 13(3), 5-17.

Porter, M. E. (1990). The competitive advantage of nations. Harvard Business Review, 68(2), 73-93.

Pradana, R. A., & Rachmawan, A. H. (2021). Implementasi Transformasi Digital pada UMKM di Era Revolusi Industri 4.0. Jurnal Manajemen Informatika, 7(1), 34-41.

Ray, S., Kulkarni, A., & Ray, P. K. (2019). Digital Transformation: Expert Perspectives. CRC Press.

Reny T. J Munthe & Rahadi. (2021). Analisis Kebijakan Pengembangan Usaha Kecil dan Menengah (UKM) dalam Meningkatkan Perekonomian Indonesia. Jurnal Sosial, Ekonomi, dan Humaniora, 2(1), 27-34.

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. The Leadership Quarterly, 15(1), 33-53.

Sugiyono. (2014). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta.

Setiyani, N. D. (2020). Pengaruh Transformasi Digital pada Kinerja Bisnis UMKM di Era Industri 4.0. Jurnal Inovasi, 7(2), 150-159.

Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. Handbook of Creativity, 1, 3-15.

Suksmanto, R., & Fitriyani, N. L. (2020). Keputusan Investasi Teknologi Informasi pada UKM: Peran Faktor Organisasi, Teknologi, dan Individu. Jurnal Manajemen Teknologi, 19(3), 194-213.

Tapscott, D. (1996). The digital economy: Promise and peril in the age of networked intelligence. McGraw-Hill.

Thomas W. Zimmerer, N., Scarborough, N. M., & Wilson, D. O. (2008). Essentials of Entrepreneurship and Small Business Management. Pearson Prentice Hall.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view.MIS Quarterly, 27(3), 425-478.

Widyastuti, R., & Prabowo, H. Y. (2020).Pengembangan UMKM dalam Era Digital. Jurnal Dinamika Manajemen, 11(2), 141-150.

Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press.

Widjaja, A. E., & Winarso, H. (2019). Effect of Entrepreneurship Orientation, Innovation Capability, and Competitive Advantage to Business Performance of Micro, Small, and Medium Enterprises. Journal of Innovation in Business and Economics, 1(1), 36-42.

West, M. A., & Farr, J. L. (1990). Innovation at work: Psychological perspectives. Social behavior and personality: an international journal, 18(1), 3-10.

We Are Social. (2022). Digital 2022: Indonesia.Diakses   pada   9   Juni   2023,   dari https://datareportal.com/reports/digital- 2022-indonesia

Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press.

Wijoyo, S. A., Nugroho, A. S., & Santosa, P. B. (2020). E-commerce sebagai Pendorong Pertumbuhan Usaha Mikro Kecil Menengah (UMKM) pada Era Digital. Journal

Pengembangan Teknologi Informasi dan Ilmu Komputer, 4(10), 1352-1359.

Wiyono, S., Maulidyawati, T., & Ramadhan, R. (2020). Dampak Pandemi Covid-19 terhadap Ekonomi Indonesia. Jurnal Ekonomi dan Pembangunan Indonesia, 20(2), 126-137.

Widnyani, A. A. M., Damayanti, N. P., & Putra,
M. D. W. (2021). The Impact of Digital Transformation on Micro, Small, and Medium Enterprises (MSMEs) Performance in Bali. International Journal of Business, Economics and Management, 8(2), 50-60.

Wibowo, A. (2020). Peningkatan Daya Saing UMKM melalui Inovasi Teknologi Digital. Jurnal Ekonomi dan Pembangunan, 28(2), 169-180.

World Economic Forum. (2018). The Fourth Industrial Revolution. Diakses pada 9 Juni 2023, dari https://www.weforum.org/focus/fourth- industrial-revolution

Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualisation, and extension. Academy of Management Review, 27(2), 185-203.