



Accelerating SMES Performance in East Surabaya through Digitalization

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ABSTRACT

Purpose of this research are analyzing impact digitalization among the SMES in Surabaya City by using digital technology which measuring by their perception ease of use, usefulness and trust using digital technology and its impact on SMES Performance. Research conduct with quantitative analysis by using explanatory research design. The population of this research are 7158 SMES in Surabaya especially East Surabaya then we acquired 100 sample of SMES by using Slovin-Formula. Data collected by share questioner among 100 Respondents of SMES in East Surabaya. Data analyzed by using SEM-PLS with instrument validity and reliability test then bootstrapping to know hypothesis-testing results. Results identified perceived ease of use and usefulness affect SMES performance and can improve productivity by using digitalization technology. However, trust has no impact on SMES Performance in Digitalization Technology Context. This study offers significant advantages for the government, particularly in Surabaya City, aiming to enhance digitalization among SMEs by leveraging social media and e-wallets, thereby improving their technological performance. Additionally, it sheds light on how SMEs can harness digitalization technology to increase profitability and reap numerous benefits.

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INTRODUCTION

The rapid advancement of technologies such as the internet, cloud computing, artificial intelligence, and sensor technology has provided the foundation for digital transformation. Increasing computing speed and capacity enable the development of innovative solutions. Many governments worldwide are encouraging the acceleration of economic digitization as part of economic growth strategies. This may include investments in digital infrastructure, the development of regulations supporting innovation, and incentive programs for technology-adherent companies. Consumers are increasingly adopting digital lifestyles, such as online shopping, using mobile applications, and accessing information through digital platforms.

Improved connectivity and internet accessibility have transformed how people interact with products and services.

Digitalization has ushered in a transformative era in the global economy, with profound impacts across various sectors and facets of economic activities. One of the most notable effects is the increased efficiency and productivity realized through the adoption of digital technologies with automation of processes, the integration of data-driven decision-making, and the utilization of advanced analytics have streamlined operations, allowing businesses to perform tasks faster and with reduced errors (Schumacher et al., 2016). This enhanced efficiency contributes to overall productivity gains, enabling organizations to allocate resources more effectively and focus on strategic initiatives. Digitalization has become a catalyst for innovation, giving rise to new products, services, and business models provided by disruptive technologies such as artificial intelligence, blockchain, and the Internet of Things have spurred the creation of entirely new industries, challenging traditional norms and fostering a culture of constant evolution (Lavikka et al., 2018). Companies that embrace digital transformation not only adapt to change but also position themselves as leaders in a dynamic and competitive marketplace.

The use of digital-based technology in the economic world is a breakthrough in increasing productivity both micro and macro in building overall economic growth. The Digital Economy has a role in improving welfare as measured at income levels in both urban and rural communities to nationally (East Venture, 2023). Digital economy activities have had an impact on the emergence of several business startups that are able to increase economic growth in a region to encourage the welfare of the community at large. Digital platforms and communication technologies have broken down geographical barriers, facilitating global trade and market access. Small and medium-sized enterprises (SMEs), in particular, benefit from expanded reach and the ability to compete on an international scale (Autio et al., 2021). The ease of conducting business across borders has contributed to a more interconnected and interdependent global economy. As the nature of jobs evolves in the digital age, there is a discernible impact on the workforce. Automation and artificial intelligence have led to the transformation of certain job functions, necessitating a shift in the skill sets required by the workforce make some routine tasks become automated, there is an increasing demand for skills related to technology, data analysis, and digital literacy (Colombo et al., 2019). This shift presents both challenges and opportunities, emphasizing the importance of continuous learning and adaptability in the modern workforce.

The Digital Economy in Indonesia is increasing massively, marked by the emergence of several startups and marketplace-based e-commerce industries. The growth of the digital economy in Indonesia experienced growth reaching 414% from 2017 to 2021 and will continue to grow until 2025 to reach 62% (Sapulette & Muchtar, 2023). Some startups that played a role in increasing transactions include Shopee with a transaction value of 47.9%, Lazada 20.1% and Tokopedia 17.4% and so on. In other words, the increasingly massive use of digital economy encourages significant changes in economic growth. The e-commerce sector has experienced exponential growth, driven by the widespread adoption of digital platforms. Companies like Tokopedia and Shopee have become household names, revolutionizing the way Indonesians shop. According to a report by e-Economy SEA, Indonesia's e-commerce market is expected to reach \$82 billion by 2025, showcasing the immense potential of digital retail in the country (Bain & Company, 2020). The convenience and accessibility offered by online shopping platforms have not only transformed consumer behavior but have also provided a significant boost to small businesses and entrepreneurs. In the financial sector, digital payment systems and fintech solutions have gained significant traction, fostering financial inclusion. The government's commitment to digital finance is evident in initiatives like the National QR Code Standardization, aimed at creating a unified digital payment infrastructure. Mobile banking services and digital wallets, such as GoPay and OVO, have become integral to daily transactions, facilitating a cashless economy and expanding financial access to previously underserved populations (World Bank, 2023).

One of the cities that plays a role in the use of the digital economy is Surabaya City as one of the economic bases in Indonesia. Surabaya City has a GDP growth rate of around 4.03% and is one of the cities with the highest growth in East Java (Badan Pusat Statistik, 2020). In 2022, the number of increases in the trade sector reached 3.15%, the largest of which dominated by large, retail and other services (Badan Pusat Statistik, 2023). Bank Indonesia noted that the implementation of QRIS usage in East Java reached 2.3 million merchants, dominated by MSMEs, namely around 97.5% (East Venture, 2023). Surabaya has embraced smart city initiatives, leveraging digital technologies for urban planning, infrastructure development, and citizen services. These efforts contribute to a more efficient and connected city, with smart traffic management and waste management systems enhancing the overall urban experience. The digital economy has also fueled entrepreneurship and startup growth in Surabaya. Local entrepreneurs leverage digital platforms to establish and promote their businesses, with the city witnessing the emergence of co-working spaces and incubators that support the development of new ventures. Additionally, the education sector in Surabaya has experienced the impact of the digital economy, with the rise of online learning platforms and the integration of technology in education, enhancing accessibility to educational resources.

The digital economy plays a role in building service quality, market capability and opening up free markets to attract investors to a country both from the real and tourism sectors (Tang, 2023). Yao & Sun (2023) explained that the digital economy supported by infrastructure such as internet networks could increase digital transactions in a region, resulting in an increase in national and regional income. In addition, the digital economy also supported by factors such as human capital that is able to operate digital-based applications and support from the government in providing integrated services to the community to encourage business performance, especially MSMEs in the form of financial access, increasing business capacity and increasing the number of customers (Skare et al., 2023). Wang & Huang (2023) explain about digital economy as a key on performance by efficiency and energy transformation to reduce carbon emission by various stage such as production, intermediary and demand sides highlighting material efficiency within digital economy sector. Digital economy can improving capabilities and performance by driving into the innovation can achieving coordinating by digital economy and green economy (Zhang & Yin, 2023) (Zhang & Yin, 2023). This research highlighted several key aspects of the digital economy's impact on various sectors especially SMES including their performance. However, a notable research gap exists in understanding how these digital economy interventions specifically affect the performance of SMES.

Expanding upon the existing research, a promising direction for future studies lies in examining the impact of digital economy interventions on enhancing SME performance. Specifically, investigating how factors such as internet infrastructure, human capital proficiency in digital applications, and governmental support contribute to improving business performance, particularly among MSMEs, could offer valuable insights for policymakers and industry stakeholders. Moreover, exploring the potential of digital platforms to drive innovation and efficiency within SMEs, thereby enhancing their capabilities and market competitiveness, could provide practical implications for fostering economic growth and development at the grassroots level. Building upon this, our study highlights that leveraging social media and e-wallets can enhance the performance of SMEs through digitalization. By focusing on the perceived ease of use, usefulness, and trust on the technology adoption, SMEs can achieve significant improvements in their business performance.

RESEARCH METHOD

This research employed a quantitative approach with a cross-sectional explanatory research type. The population of this research are 7158 SMES in East Surabaya. By using Slovin formula we can

acquire 100 respondents representing Small and Medium Enterprises (SMEs) operating for a minimum of 2 years. The study sample calculated by the following Slovin formula:

$$n = \frac{N}{1 + Ne^2}$$

$$= \frac{7158}{1 + 7158 \times 0.1^2} = 100$$

Based on the results of the sample calculation, it showed a sample number of 100 respondents spread across East Surabaya. The data was gathered through the distribution of questionnaires to 100 SME respondents located in East Surabaya, serving as the sample. Subsequently, the collected data underwent descriptive analysis and hypothesis testing. The study utilized Smart PLS (Partial Least Squares) as the primary analytical tool, employing structural equation modeling to explore complex relationships between latent variables. Hypotheses were formulated and tested through bootstrapping, providing insights into the factors influencing SME performance.

RESULTS AND DISCUSSIONS

The initial stage in assessing PLS-SEM involves evaluating the outer model, for acquire validity of model. This entails testing for convergent. Convergent validity of reflective indicators by using the SmartPLS 2.0 software, where the loading factor value for each construct indicator. Convergent validity is deemed satisfactory if the loading factor exceeds 0.7 for all items measuring constructs and AVE values for discriminant reliability across all measurement variables exceed 0.5, indicating the reliability of all items in measuring their latent variables (Hair et al., 2019).

Table 1. Validity and Reliability Test

No	Variable	Item	Outer Loading	AVE
1.	Ease of Use	E1	0.851	0,654
		E2	0.798	
		E3	0.781	
		E4	0.804	
2	Usefulness	U1	0.826	0,703
		U2	0.835	
		U3	0.871	
		U4	0.821	
3	Trust	T1	0.783	0,687
		T2	0.768	
		T3	0.879	
		T4	0.880	
4	SMES Performance	SP1	0.804	0.696
		SP2	0.817	
		SP3	0.884	
		SP4	0.840	
		SP5	0.824	

(Source: Smart PLS Output 2.0, 2023)

Based on the results of validity and reliability testing, it is known that each item has an Outer Loading value above 0.8 so that it can be said that the instrument has a fairly high validity while reliability based on the AVE value is also above 0.5 so that the instrument can be said to be reliable.

Hypothesis Testing

The last step involves establishing the connection between the impact of exogenous variables on endogenous variables. Significance is evaluated using p values for a confidence level

of 95% (considered significant at $\alpha < 0.05$), with degrees of freedom (df) calculated as $n-2$, where n represents the sample size. Hypothesis testing for each relationship between latent variables is outlined in Table 2.

Table 2. Hypothesis Testing Results

Hypothesis	Variable Observed	P-Value	Decision	Hypothesis
H1	Ease of Use -> SMES Performance	0.000	Significant	Accepted
H2	Usefulness -> SMES Performance	0.000	Significant	Accepted
H3	Trust -> SMES Performance	0.096	Not Significant	Rejected

(Source: Smart PLS Output 2.0, 2023)

The interpretation of the hypothesis test results is as follows: 1) The Ease of Use variable demonstrates a significant influence on SMES Performance, as indicated by a p-value below 0.05. Therefore, it can be inferred that the ease of use on technology indeed encourages SMES Performance. 2) Similarly, the Usefulness variable exhibits a significant effect on SMES Performance, with a p-value below 0.05, suggesting that the Usefulness of technology fosters SMES Performance. However, 3) it is noteworthy that Trust does not impact SMES Performance, given its p-value above 0.05. This implies that the ease of using technology does not contribute to improving the performance of MSMEs.

Discussion

Ease of Use using Digital Technology and SMES Performance

Ease of use can improve SMES Performance in Surabaya by using social media and e-wallet to enhance performance such as financial performance, profitable and business capacity enlargement. User-friendly system reduces the learning curve, streamlines processes, and promotes overall business efficiency (Asnawi et al., 2023). The use of technology needs to consider the readiness of its users so that it can be implemented thoroughly and be able to improve performance in an organization (Hendrawan et al., 2021). By improving business performance in terms of the use of digital-based technology needs to be balanced with the ease and benefits of using the technology (Gangwar, 2020). The ease of use of digital technology such as mobile money services for SMEs in, potentially enhance their overall performance by streamlining the user experience and facilitate greater adoption and utilization of these services among SME owners (Lubua & Semlambo, 2017).

Usefulness using Digital Technology and SMES Performance

Digital economy usefulness enhancing SMES Performance in Surabaya which perceived by SMES can improve performance for business enlargement and reach more market share through social media and e-wallet. SMEs have perceived that these tools contribute significantly to their operations, decision-making, and overall business objectives, it positively impacts their performance (Owot et al., 2023). The positive impact of perceiving technology as useful is evident in its correlation with adoption in business innovation performance by fostering an environment where businesses are encouraged to thrive (Hameed & Naveed, 2019). It could be inferred that the usefulness of digitalization technology, including its broad scope, timeliness, and integration, positively impacts SMEs' performance which means implies that SMEs can effectively utilize it for planning, decision-making, and control purposes are likely to experience better performance outcomes (Hassan & Maelah, 2021).

Trust using Digital Technology and SMES Performance

In contrary, Trust has no playing a role on SMES Performance. While trust may play a role in other aspects of business operations, it does not directly contribute to improving the performance of SMES in this context. SMES in Surabaya perceived that social media and e-wallet

has ability to handle risk then it not relating on SMES performance. Although it has no significant performance but trust is the most important element to enhance the effectiveness of digital tools by fostering a collaborative and supportive business environment. Trust is a part of social business responsibility have strong impact on performance especially small-scale industries. (Gorondutse & Hilman, 2019). The results indicate a general consumer and SMES performance will get satisfaction with the current service quality, emphasizing the need for improvements that require immediate attention for enhancement, aligning with user expectations (Saputra & Gürbüz, 2021). Trust plays a crucial role in influencing the performance of SMES with transaction cost decrease by inter-organizational trust (Villena et al., 2019).

CONCLUSION

Our study highlights that leveraging social media and e-wallets can enhance the performance of SMEs through digitalization. By focusing on the perceived ease of use, usefulness, and trust on the technology adoption, achieve significant improvements in their SMES performance. The results of the hypothesis tests suggest that both the Ease of Use and Usefulness variables significantly influence SMES Performance. This highlights the importance of user-friendliness and the perceived utility of technology in driving SMES Performance. However, the Trust variable does not appear to have a significant impact on SMES Performance. While trust may play a role in other aspects of business operations, it does not directly contribute to improving the performance of MSMEs in this context. Therefore, efforts should be focused on enhancing the ease of use and usefulness of technology to optimize SMES Performance.

This study contributes to the existing literature on SME performance by empirically demonstrating the significance of leveraging social media and e-wallets for digitalization in enhancing SME performance. By identifying the perceived ease of use and usefulness as key factors driving SME performance. The findings provide empirical evidence that emphasizes the crucial role of user-friendliness and perceived utility in driving performance outcomes, thereby contributing to our understanding of the mechanisms through which digitalization influences SME success. This study offers significant advantages for the government, particularly in Surabaya City, aiming to enhance digitalization among SMEs by leveraging social media and e-wallets, thereby improving their technological performance. Additionally, it sheds light on how SMES can harness digitalization technology to increase profitability and reap numerous benefits. MSMEs should prioritize the adoption of user-friendly technology solutions to enhance operational efficiency and performance. Investing in platforms and tools that are easy to use can facilitate smoother workflows, training time for employees, and improve overall productivity

The study's findings may be limited by the sample size and geographic scope, potentially restricting the generalizability of the results to other contexts or populations. Future research could address this limitation by employing larger and more diverse samples, encompassing a broader range of SMEs across different regions and industries. Further research could explore the underlying factors contributing to the significant influence of Ease of Use and Usefulness on SMES Performance. Specifically, investigating how different aspects of user-friendliness and perceived utility impact various dimensions of SMES operations and outcomes could provide deeper insights.

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