Journal of Social Economics Research

2023 Vol. 10, No. 4, pp. 146–160 ISSN(e): 2312–6264 ISSN(p): 2312–6329 DOI: 10.18488/35.v10i4.3509 © 2023 Conscientia Beam. All Rights Reserved.



The impact of financial literacy, financial technology, and financial inclusion on SME business performance in Malang Raya, Indonesia

 Erna Retno Rahadjeng¹⁺
 Heri Pratikto²
 Imam Mukhlis³
 Nurika Restuningdiah⁴
 Iva Khoiril Mala⁵

Article History Received: 10 May 2023

Keywords

Business performance Financial inclusion

Financial technology

JEL Classification:

Financial literacy

Malang Raya.

SMEs

P43.

Revised: 15 August 2023

Accepted: 28 September 2023

Published: 3 November 2023

¹³Faculty of Economics and Business, Universitas Negeri Malang, Indonesia.
¹²Email: <u>erna.retna.2104139@students.um.ac.id</u>
¹²Email: <u>iva.khoiril.2204319@students.um.ac.id</u>
¹²Stander of Management, Faculty of Economics and Business, State University of Malang, Indonesia.
¹²Email: <u>heri.pratikto.fe@um.ac.id</u>
¹²Email: <u>imam.mukhlis.fe@um.ac.id</u>
¹²Email: <u>nurika.restuningdiah.fe@um.ac.id</u>
¹²Department of Management, Faculty of Economics and Business, University of Muhammadiyah Malang, Indonesia.
¹³Department of Management, Faculty of Economics and Business, University of Muhammadiyah Malang, Indonesia.
¹⁴Department of Management, Faculty of Economics, Kadiri Islamic University, Indonesia.



ABSTRACT

The purpose of this study is to determine the relationship between financial literacy, financial technology, and financial inclusion and the business performance of SMEs in Malang Raya, Indonesia. Looking at various cases related to financial progress, all of which are turning to technology to ensure time efficiency, there is a need for further development related to research on financial technology, and financial inclusion for SMEs' business performance in Malang Raya. The analysis in this study used bibliometrics and PLS. Bibliometrics is used to find relationships that will later become new things. Before the bibliometric analysis, this research looked for references to research through Publish or Perish, so more than 200 reputable journals based on electronics were found in accordance with this study. Furthermore, filters related to the scope are more specifically related to financial technology and the inclusion of SMEs' performance. So fintech is being discovered as a novelty between financial literacy and financial inclusion. The second analysis examines the influence of financial literacy, financial technology, and, financial inclusion on the business performance of SMEs. The results of this study using PLS show that financial literacy has a positive and significant effect on the business performance of SMEs. Financial technology does not affect SMEs' business performance, and lastly, financial inclusion has a positive and significant effect on SMEs' business performance. The limitation of this study is related to the object of research that still focuses on Malang Raya.

Contribution/Originality: The findings in this study look at the results of financial technology and financial inclusion having a positive and significant effect on the performance of SMEs with the Mix Method and objects that are different from other research in Malang Raya.

1. INTRODUCTION

Performance is a company's effort to achieve goals that have been agreed upon and officially set. A matrix is needed to measure performance in terms of increasing success or achievement in business. Measurement in this study uses key performance, which has dimensions such as business processes with realistic goals, quantitative and

qualitative measurement of results, investigation of factors that affect goals, and knowing company strategy, including the company's vision and mission (Hamid, 2015). In carrying out good performance in all fields, including finance, production, distribution, and marketing, it is an absolute requirement for MSMEs to continue to exist and develop and optimize their goals (Septiani & Wuryani, 2020). MSMEs are independent business units managed by individuals or groups that can be in the form of individual companies, partnerships, or limited liability companies. The indisputable significance of micro, small, and medium enterprises (MSMEs) in Indonesia. Since the economic crisis that hit Indonesia in 1998, it has been proven that the MSME sector has been able to stand alone and survive in the face of crisis to date. The role of MSMEs is relatively important for the Indonesian economy. In order for MSMEs to continue to play a good role, survive, and even develop, better financial literacy and understanding are needed. Mastering financial literacy and understanding enough for them will be able to help them manage their finances as efficiently and effectively as possible. Herdjiono and Lady (2016) and Sanistasya, Raharjo, and Iqbal (2019) explained that MSME players need to know how to manage their finances well and how to invest technically. The study aims to investigate the selection of objects within the Malang Raya region, encompassing Malang city, Malang Regency, and Batu city. However, it is worth noting that Batu city is region located in East Java that exhibits significant interconnections with MSMEs. Based on existing data from the Batu City Department of Industry, Trade, and MSME Cooperatives (Diskoperindag and MSMEs), the number of MSME players reached 28,060 business units; in 2020, there were 23,458 units. The number of business actors is supported by data from the Central Bureau of Statistics in Batu City in 2020, which shows that the business profile in Batu City tends to be dominated by micro-enterprises. This can be seen from the percentage of small and medium enterprises, which reaches more than 95% (DiskoperdagBatu, 2020).

MSMEs in Malang are currently considered to be starting to grow, but MSME players are still comfortable using cash in transactions. Another issue that MSMEs frequently encounter is financing for business development. Customers of MSME products also want ease of transactions. MSMEs in Malang City diversified from the clothing, food and beverage, and handicraft sectors after being registered as small businesses (MSMEs) by the local government. In Malang City, out of 70,000 MSMEs, only 30% sell online. MSMEs often face a number of obstacles, one of which is capital, merchandise distribution, licensing, manual book keeping, and online marketing.

The growth of fintech in Indonesia is in line with the increasing number of fintech companies, until now (in 2021), the number of fintech companies incorporated in AFTECH, or the Association of FinTech Innovation Organizations, has been officially appointed by the Financial Services Authority (FSA). Based on Financial Services Authority Regulations (FSAR) No.13/2018, there are as many as 359 companies (Fintech Indonesia, 2021). The growth in the number of fintech companies is in line with the growth in the number of digital consumers. A study conducted by Facebook and Good and The Company revealed that the number of digital consumers in Indonesia is expected to grow from 119 million in 2019 to 137 million in 2020. Bank Indonesia also estimates that crypto currency translation transactions will increase by 32.3% from Rp201 trillion in 2020 to Rp266 trillion in 2021 (Dakum & Asari, 2020; Putri, Komara, & Setyowati, 2021) alternative for the community, especially during the COVID-19 pandemic, especially for small and medium enterprises. Fintech has a very important role in the development of SMEs. Such as providing convenience and efficiency for MSMEs in terms of technology-based financial management, such as digitizing financial statements, online payments, and lending technology. The existence of fintech also increases its accessibility to new customers by expanding the market to the unbanked community with convenient and easy digital financial transaction services (Fajar & Larasati, 2021; Fifaldyovan & Supriyanta, 2021), knowledge of finance can provide fintech capabilities to transform all types of transactions. In this case, taking the example of financial literacy, it is interpreted as a cognitive aspect, namely a person's knowledge and cognitive abilities about finance. Financial literacy describes a person's ability to recognize and apply concepts related to finance. According to Orton (2007), financial literacy can be a tool for making financial decisions in such a way that it becomes very important for life. The more knowledge related to finance, the better

financial decisions are taken, so it is likely that a person's financial management behavior will be more responsible. This way, it will encourage individuals to be aware of their finances in the future. Hence, there exists a positive correlation between an individual's attitude towards personal finances and their proficiency in financial management, as they establish a connection between financial inclusion and effective management practices. The Fintech gap, namely funding for the empowerment of MSMEs, is currently important because of its large contribution to the national economy. The latest data states that the contribution of MSMEs has reached 61.07% for PBD and 97% for job creation. Head of Education, Literacy, and Research of the Indonesian Joint Funding Fintech Association (JFFA), Entjik S. Djafar, said the JFFA is committed to inviting players in Joint Funding Fintech industry to participate in increasing digital financial literacy and inclusion for MSMEs. Currently, more than 50% of loans disbursed come from the MSME sector (Fajar & Larasati, 2021; Financial Services Authority, 2019). According to the survey, almost 90% of MSMEs need financial assistance, especially during the current pandemic. That's where Joint Funding Fintech can help answer these needs. Of course, in this case, Fintech Joint Funding will continue to innovate to reach more consumers, especially MSME players, so that their businesses continue to grow and run, which will ultimately contribute to post-pandemic economic recovery." (Setyawan & Mita, 2023; Shrestha, 2022; Sp, Riady, Majid, Marliyah, & Handayani, 2022; Tay, Tai, & Tan, 2022).

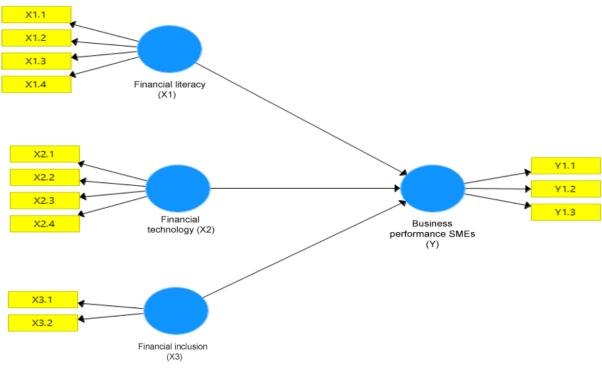
Financial inclusion is an important factor in reducing economic inequality (Widayanti, Damayanti, & Marwanti, 2017). Entrepreneurs still face many obstacles in the development process and even in maintaining business operations. Financial inclusion is an effort to eliminate all forms of price and non-price barriers to public access to the use of financial services (Hilmawati & Kusumaningtias, 2021). Meanwhile, according to OJK (2022), financial inclusion is the ability to access various financial institutions, products, and services based on the needs and abilities of the community to improve welfare. Based on research (Bongomin, Gago, Oladele, & Denning, 2017), there are four measures of financial inclusion, namely: access, use, welfare, and quality. Furthermore, OJK (2022) outlines financial inclusion indicators, namely accessibility, availability of financial products and services, and use of financial products and services, as well as quality. Research by Ozili (2021) and Yue, Korkmaz, Yin, and Zhou (2022) shows that financial inclusion variables can affect MSME performance. Financial inclusion will bring benefits to communities, helping them improve their standard of living, especially those in remote and border areas. Financial inclusion is a key factor in supporting economic growth, especially by optimizing the contribution of the financial sector and expanding access to financial services for the public. Commercial entities such as MSMEs, requires capital assistance so that they can grow their businesses and contribute to their performance (Chuc et al., 2022; Malagueño, Lopez-Valeiras, & Gomez-Conde, 2018; Mujanah, Ratnawati, & Kusmaningtyas, 2019; Nuryakin, Widowati, & Fatmawati, 2018; Tram, Lai, & Nguyen, 2023; Wati, Sumiati, & Andarwati, 2021). The existence of a research deficit creates gaps or opportunities for researchers to conduct research or further investigate the relationship between financial literacy, fintech, and financial inclusion, which has an impact on the performance of small and medium enterprises. Because some of the results of previous research have become research gaps, they can be used as a new point in the current research.

2. METHOD

The journal is based on the bibliometric methods of Vosviewer, and SmartsPLS combines search data from the Vosviewer application through data co-citation or to build keyword maps based on *data co-occurrence* data. Using a public or private programme, that can analyze literature or relevant references that are in the agreement with this study, is the first step before diving into bibliometric analysis to determine the novelty of our target keywords. Publish or perish will find 100 journals for the Google Scholar category and a maximum of 200 journals for the Scopus category. After searching for publishing or perishing, continue to filter journals that are more relevant to the study. Mapping is done to make it easier if you want to enter data through Vosviewer. Furthermore, data input is carried out in the Vosviewer application on all journals that have been filtered. The keywords chosen by this

study are financial literacy, financial inclusion and MSME business performance in Malang Raya. Vosviewer can display maps in a variety of ways, each in bubble form with various clusters (Eck, Van, & Waltman, 2019). The result of the bubble color is a solution to a problem that will later become the need of all business people, such as MSMEs. This study included keywords from journals in 2018-2023, so it can explicitly find out which keywords are still rarely researched. The appropriate journals, specifically in 2019-2021, obtained the results of all current journal filters. Once novelty is found in the study, it will proceed to quantitative methods. Anderson and William (2011) and Bhattacharya and Chetty (2020) stated that quantitative research begins with problem formulation, producing hypotheses or research questions, related literature reviews, and quantitative analysis so that the research is referred to as hypothesis test research. The reason that underlies explanatory research is because this study will empirically prove and explain the influence of the role of financial literacy, financial inclusion, and financial technology on SME performance with SmartPLS 3.3. The sample in this study was 215 SMEs in Malang Raya, Indonesia. Thus, the existence of these two analytical methods will strengthen this research process. Here is the research design of SmartsPLS 3.3.

Figure 1 Illustration research design.





3. RESULTS AND DISCUSSION

The results of this study show that there are various keywords that appear in the bibliometric analysis of the Vosviewer application. The basic keywords in the results of this analysis are financial literacy, SMEs, and innovation. All categories that have networks will be grouped by color. The results showed that there were five clusters in this study. Here are the results from Figure 2. The Vosviewer result scheme is based on clusters or network visualization.

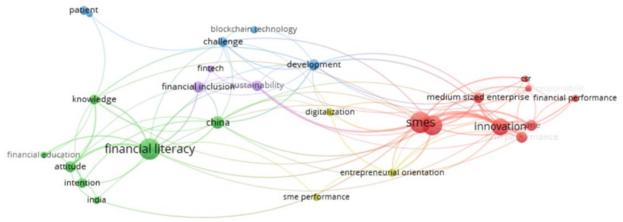


Figure 2. Vosviewer based on network visualization.

It can be explained that there is a connection in the network in this study. Classification by keyword will give you any factors related to the outline in the keyword. There are 5 clusters in this study, which can be seen in Table 1.

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Enterprise social responsiveness	Attitude	Blockchain technology	Digitization	Financial inclusion
CSR	Chinese	Challenge	Entrepreneurial orientation	Fintech
Financial performance	Financial education	Development	SME performance	Sustainability
Company performance	Financial literacy	Patient	-	-
Innovation	India	United States	-	-
Medium size enterprise	Intention	-	-	-
Performance	Knowledge	-	-	-
SME	-	-	-	-

Table 1. Cluster bibliometric analysis based on network visualization.

There is a classification process in the Vosviewer results, so researchers want to find out more by not only looking at Overley's visualization factor. Explicitly, this study will find out more details related to what keywords can be used as novelty or find relationships between variables that are still rarely studied. Based on Overley Visualization or the latest from 2019, you can see the following image:

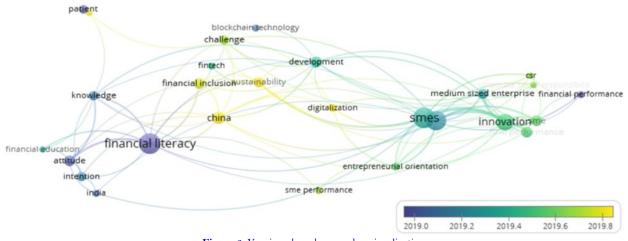


Figure 3. Vosviwer based on overlay visualization.

Based on Figure 3, it illustrates the results of overlay visualization, which can be seen in terms of various colors ranging from dark (purple) to light (yellow). The classification of purple as a keyword has passed, and many studies were conducted in 2019 with the keywords financial literacy, attitude, intention, India, knowledge, patient, and financial performance. Furthermore, looking at tosca and green colors is research that became a trending topic in 2019, such as the keywords SMEs, innovation, CSR, development, Fintech, and block chain technology. As for yellow, it is research that is still rarely carried out in 2019, such as financial inclusion, sustainability, China, and digitalization. Therefore, this study takes the relationship between variables between financial literacy, fintech performance for SMEs, and financial inclusion as new.

The search process for new research is to focus on keywords about financial literacy. Vosviewer's results that associate various keywords with the novelty of this study can be as follows:

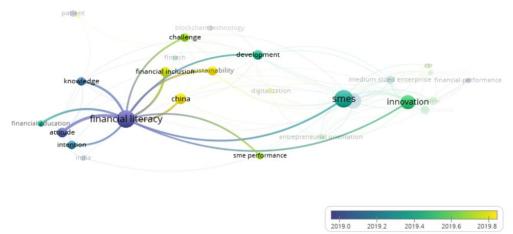


Figure 4. Overlay visualization based on financial literacy keywords

Based on Figure 4, the visual representation of important words related to understanding money is called the financial literacy classification overlay. It includes topics like financial inclusion, China, challenges, and SME performance, which haven't been studied much before. That's why researchers are interested in connecting financial inclusion and SME performance in this study. We can say that there is knowledge about money that can help small businesses handle their finances. Ali and Li (2021) said that being financially literate means knowing different financial ideas, being able to talk about them, and handling your own money and business finances (Adeella & Rio, 2021). Huston (2010) said that knowing about finance is not enough anymore. Now, it's important to actually use that knowledge to make smart decisions about money in daily life. But, in books and articles, people often use the words financial literacy, financial literacy, and education to mean the same thing. Financial literacy is the ability to understand and use information about your money and how to manage it. Financial literacy has two parts: knowing and applying. Financial knowledge is the information and understanding that help us make decisions about money. It includes knowing how to use it effectively. In essence, financial literacy refers to an individual's possession of the necessary information and competencies to proficiently manage their financial resources. This encompasses comprehending significant financial concepts, possessing the self-assurance to prudently handle their financial matters in both the immediate and extended periods, and making well-informed financial choices. The long-term finance treatment (Adeella & Rio, 2021) is about how to manage money for a long time.

Financial literacy means being able to understand and manage your own money well. According to Raut (2020), financial literacy is the ability to manage money wisely and make wise decisions for other people's future well-being. When a company knows a lot about money, they are better at dealing with their business's money. If we can find and get money the way we expect, we can keep our business going. Successful regulation, financial stability, and financial inclusion all need certain aspects of financial management. According to Rohner (2020), there

are several important reasons why it is urgent to include more people in the financial system. This includes making the economy work better, making sure the financial system is stable, reducing the responsibility of risky financial actors, making the financial market better, creating new opportunities for banks, improving Indonesia's development, helping the global economy, reducing inequality and poverty, and making people's lives better. Tristiarto and Wahyudi (2022) also found that financial inclusion can help reduce poverty. Inclusion means making sure everyone can use financial services by getting rid of any obstacles, like how much they cost or anything else that might stop people from using them. Financial inclusion means that everyone in a community has access to different types of financial institutions, products, and services that are suitable for their needs and abilities. This is done to improve the well-being and interests of the community.

The concept of budgetary incorporation came after the concept of monetary incorporation. Leyshon and Thrift (1995) characterized budgetary avoidance as a preparation that prevents social groups and people from getting to the formal money-related framework. Chen and Divanbeigi (2019) clarified that monetary prohibition may be a handle in which individuals have trouble accessing or utilizing budgetary administrations and items within the open advertise that meet their needs, so they cannot live a social life that's in agreement with their society and put of home (Tristiarto & Wahyudi, 2022). Money-related consideration is characterized as an exertion to diminish all forms of duty and non-tariff boundaries to open access to utilize of financial services. Money-related consideration is one frame of the national budgetary incorporation technique, or, to be specific, the right of everybody to have access to all money-related institution administrations in an opportune, helpful, total, and instructive, and reasonable way, while still maintaining human respect. Shrestha (2022) characterizes monetary incorporation as the extent of individuals and businesses utilizing monetary administrations who have been the subject of policymakers, analysts, and interested parties. Money-related incorporation could be a condition where most people can utilize accessible money-related administrations and minimize the presence of bunches of people who are unaware of the benefits of money-related get-to through openness and accessibility without being far-fetched. Another definition related to monetary consideration (Supramono, Stefanie, & Damayanti, 2020) may be a comprehensive exertion to dispose of all shapes of obstructions, both cost and, non-price, for open access to utilize monetary administrations.

In earlier research, it was explained that financial inclusion is not optional, but necessary. They also found that banking plays a key role in making it happen. The use of technology to improve access to financial services has a strong impact on the financial market, particularly for businesses. The changes happening in the financial industry play a vital part in enhancing financial services, which in turn impacts the stability of the financial system. The stability of the financial system can be understood by looking at how well the banking sector is doing, like giving out loans and managing debt. It can also be seen through efforts to make sure more people have access to financial services, which can help improve the well-being of the public. However, many people in Indonesia are not aware of the benefits of including fintech in their financial system and how it can help improve stability.

The goals of financial inclusion are to make sure that everyone has access to financial services and resources. This is important for overall economic growth, reducing poverty, making sure everyone has equal opportunities, and making sure the financial system is stable. 2) Offer money-saving products and services that fit the requirements of the community. 3) Make more people understand and know more about financial services. 4) Make it easier for people to use banking and other financial services. Improving collaboration between banks, microfinance organizations, and other financial institutions that are not banks 6) Using technology to make it easier for more people to access and use financial services.

This same technology can be considered the second stage of technological finance and lasted until the middle of the 20th century. Starting with the inception of digital information and communication technology, the era of digital financial technology, sometimes called Be-Finance, confirmed that by the late 1980s, financial services had become an important part of the digital industry, relying on electronic transactions between financial institutions, market funding agents, and customers around the world (Musari & Hidayat, 2022). In the banking sector,

technology is spread throughout the banking signal chain; this chain has developed into four groups: Customer first, e.g., Retail, trade and investment. Secondary channels, e.g., affiliate, broker, web, mobile, and social. Third, funding service providers, such as banks and non-banks, and finally, interbank providers, such as exchanges and networks. Large financial service providers, especially banks, have pioneered the use of information technology internally since the 1960s. In particular, major banks have set up technology information departments, often recruiting several thousand people. This division has a proprietary form of system programming and manages a corporate network that connects internal departments, including branch offices. The system has adopted electronic interfaces to engage with clients and address the concerns of external stakeholders, including ATM and internet banking platforms, throughout its evolution. Multinational electronic networks such as the Society for Worldwide Interbank Financial Telecommunication (SWIFT) and the Trans-European Automated Real-Time Total Repayment Total Rapid Transfer System ("TARGET"); first appeared on the interbank market in 1973 and 1999. These are important bricks for interbank digitization, forming an interface with their internal systems (interbank space). The newest network is the Common Euro Payments Area of Europe (CEPAE), started in 2009 and recently upgraded to handle real-time processing between banks (El Amri, Mohammed, & Bakr, 2021; Yue et al., 2022). In addition, in the 1980s, vendor exchanges began using trading systems and phased out physical electronic trading platforms instead of exchanges. Now fully electronic, stocks, certificates, and other derivatives can be traded in real time (Figueiredo, Gonçalves, & Teixeira, 2021). A globally diverse set of user-friendly banking brands with different and inconsistent information systems highlights the need for standardization. Financial firms are leading standard interface initiatives, and IT vendors are providing software packages. And standard interfaces, for example, aim to reduce the inefficiencies of system ownership. Given these problems, researchers are looking for several studies related to Fintech related to transaction processes and innovations carried out by business people, especially MSMEs. Thus, this problem can be overcome through Vosviewer, which connects various studies to show something new in this industrial era. The results of the researcher's search using Vosviewer can be seen in Figure 5.

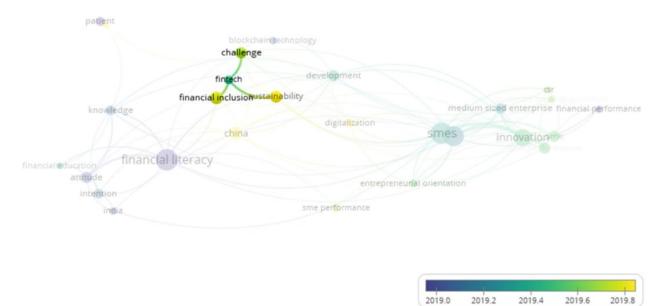


Figure 5. Overlay visualization based on fintech keywords.

Based on Figure 5, this text says that there are many different definitions of Fintech in a number of documents. Fintech means using technology to offer financial solutions. Fintech means using digital technology to make financial services better and more efficient. It includes companies that use technology to improve the financial system. Fintech is all about creating new ways of doing business in finance that have a big impact. Digital finance

has many benefits. For instance, digital finance can make sure more people have access to financial services, even those who are not involved in the financial sector. This can also help provide basic services to individuals. Nearly 50% of people in developing countries already have mobile phones, which makes digital finance more accessible to them (Albastaki, 2021; Hasan & Habib, 2022; Musari & Hidayat, 2022). Here is a simplified version of the text: E. In the year 2022, please rewrite this text using simple words. Fintech is a fancy term for using new technology to do financial stuff like banking and making money. It means coming up with new ways to do business and making products that make money easier to use. There are different kinds of banking services that use technology, like using your phone to pay for things, doing your banking on your phone, doing your banking on the internet, and using digital money. In this study, we tried to understand how the relationship between financial literacy, financial inclusion, and financial technology affects each other. We used SmartPls to analyze and reanalyze our findings. The findings from the analysis are shown in Figure 6.

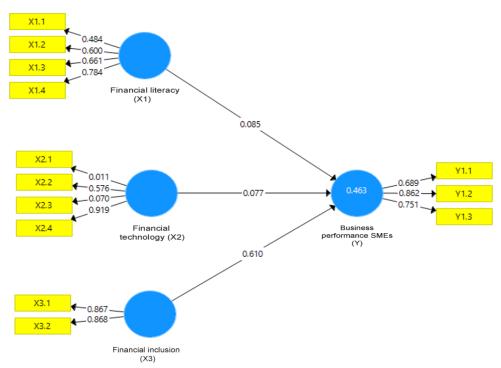


Figure 6. PLS intelligence results financial literacy, financial inclusion, financial technology.

In Figure 6, it can be concluded that, if the results are all positive and significant, the relationship of all variables is said to be influential if the alpha value is at least 0.5 (Hair, Hult, Ringle, & Sarstedt, 2017). In this study, it can be seen that all indicators have a loading factor value of 0.5 except for indicators X2.1 and X2.3 in the Fintech variable. Due to the resistance of these indicators in X2.1 and X2.3 with explanations related to remote SME areas, signal interference is also a major factor. The results of this study are not significant, and there is still a lack of information related to the use of various fintechs. Supported by research from Salwaa, Putri, and Damayanti (2020) and Setyawan and Mita (2023), there is no influence between fintechs and SME business performance because there is still a lack of usage information from various fintech media and the regeneration of SMEs or family business SMEs. So it can be concluded that, the existence of fintech does not reduce the risk to particular areas or the lack of optimal socialization in SMEs. Plus, there are SMEs that are in the process of regeneration because of family businesses, so the managers of these heirs must be able to adjust the use of fintech in the current era. So the alpha cronbach in this study shows the following:

Variable description	Cronbach alpha	rho_A	Composite reliability	(AVE)
Financial literacy	0.672	0.683	0.731	0.578
Financial inclusion	0.660	0.673	0.859	0.753
Financial technology	0.657	0.667	0.712	0.523
Business performance	0.623	0.647	0.813	0.593

Table 2. Cronbach alpha, composite reliability, and extracted mean variance (AVE).

Furthermore, advanced reliability tests with a Cronbach Alpha of more than 0.6 showed the reliability of all variables studied. Reliability test are results in Table 2. This means that all structures are reliable and have a Cronbach alpha value higher than 0. 6. All variables are reliable by default. Discriminant validity is used to make sure that each hidden variable has a different meaning from the others. This model is considered good if the diagonal value is higher than the correlation between different structures. The results of the validity discriminant test show that all the structures in the model have square roots of AVE that are higher than the correlation value with other hidden structures. This means that the model meets the criteria for discriminant validity. We used the partial least squares (PLS) t-test to perform the effect test. This text is about using software called SmartPLS 3.3 to create a model. Using bootstrapping techniques, we can find the R-squared and significance test values and see them in Table 3.

Table 3. R-Square value.						
Variable description	R square	R square adjustable				
SME business performance	0.463	0.455				

Based on Table 3, the R-Square value of SME business performance is 0.463, which means that SME business performance has variables that can be explained by financial literacy, financial inclusion, and fintech. Furthermore, hypothesis testing on PLS is also known as internal model testing. This test includes direct and indirect significance tests and measures the influence of exogenous variables that affect endogenous variables. The analysis incorporates a coefficient of determination to assess the extent to which two independent variables contribute to the dependence variable. Additionally, it employs a t-test to evaluate the significance of concurrent impact, as well as another t-test to establish the significant level of simultaneous effects. Individuals devoid of variables. However, you must first perform a correlation test to ensure that there is a relationship between each independent variable and the dependent variable. Figure 7 Illustration the results of the hypothesis test between variables.

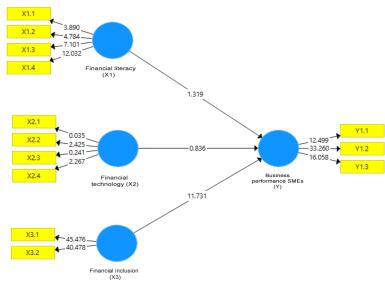


Figure 7. Results of hypothesis test between variables.

Once done, Bootstrap will meet the results of the hypothesis test directly. The following is a hypothesis test between variables, as shown in Table 4.

Table 4. T-test results.						
Variable description	Statistics T	P value				
Financial inclusion (X3) -> SME business performance (Y)	11.678	0.000				
Financial literacy $(X1) \rightarrow SME$ business performance (Y)	1.214	0.000				
Financial technology (X2) -> SME business performance (Y)	0.747	0.987				

H.: The Effect of Financial Literacy (FL) on SME Business Performance (BP)

The results of the analysis test show that p value of 0.000 < 0.050 means that financial literacy has a significant effect on SME business performance. This means that the level of knowledge and understanding of financial literacy will drive SME business performance. The results of this study are supported by previous research from Putri and Christiana (2021); Mancebón, Ximénez-de-Embún, Mediavilla, and Gómez-Sancho (2019); Lyons, Grable, and Zeng (2019); Malinda, Masyita, Rahman, and Anwar (2018); Mirzaei and Buer (2022); Khan, Siddiqui, and Imtiaz (2022)and HC (2022).

H2: The Effect of financial technology on SME business performance.

The results of the analysis test gave p value of 0.987 < 0.050, meaning financial technology did not have a significant effect on the business performance of SMEs. So, the existence of fintech does not necessarily mean that all SMEs can run it, as seen from the regional level, and socialization is related to effective and efficient use for SME business performance. It can also be seen that there are efforts from SMEs to become family businesses that will later regenerate for business development. Supported by research in line with Fajar and Larasati (2021); Wall (2021); Anah and Ningsih (2020); Siska (2022); Menne et al. (2022) and Setyawan and Mita (2023).

H_s: The Effect of Financial Inclusion (FI) on SME Business Performance (BP).

The results of the analysis test provide a significant p value of 0.000 > 0.050, which means that FI has a significant effect on SME BP. Automatically, the use of FI will drive SME BP. The results of this study are supported by the findings of Rohner (2020); Assefa (2020); Sanistasya et al. (2019); Lyons and Kass-Hanna (2021); Adetunji and David-West (2019); Yue et al. (2022), and Tay et al. (2022).

It can be concluded that there is a correlation test on each of the independent and dependent variables and a significant or insignificant relationship. Supported by a positive and significant relationship between the variables of financial literacy and financial inclusion which shows that for knowledge, understanding, and use, all can access it according to the measure of regional rejection. As for the financial technology variable, it has an insignificant influence because there is still no signal access in remote areas and a lack of socialization related to the contribution of SME empowerment and the local economy in the use of various types of fintech, which is said to be the easiest, simplest, and most effective to do. Supported by the age factor of SMEs who are still carrying out the regeneration process for SMEs based on family businesses.

4. CONCLUSION

MSMEs are independent business units run by individuals or groups that can be in the form of individuals, partnerships, or limited liability companies. The contribution of SMEs in Indonesia is unquestionable. Since the economic crisis that occurred in Indonesia in 1998, it has been proven that the SMEs sector has been able to stand alone and survive in the face of the crisis so far. The role of SMEs is relatively important for the Indonesian economy. The development of the current era makes everything mandatory instantly. For example, all transactions must be effective and efficient. This research reviews the potential and optimization of SMEs to continue to develop their business performance. The demands of the times require them to adjust all transactions related to their

business. The discussion of this study aims to determine the impact of a series of transactions such as financial literacy, financial technology, and financial inclusion, on SME business performance in Malang Raya, Indonesia. It can be concluded that there is a lack of use of fintech in remote areas due to access signal barriers and a lack of socialization of various types of fintech that are considered easy and simple. The presence of SME managers who are in the process of transitioning their roles to the next generation of heirs is a significant factor in the continued sustainability of family business. It is anticipated that future study will entail recommendations for investigating issues pertaining to other entities associated with the research variable.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Éthical Committee of the Universitas Negeri Malang, Indonesia has granted approval for this study (Ref. No. 25.10.11/UN32.20/PB/2023).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Data Availability Statement: The corresponding author can provide the supporting data of this study upon a reasonable request.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Conceptualization and methodology, E.R.R. and H.P.; formal analysis, I.K.M.; investigation, E.R.R. and I.M.; project administration, I.K.M. and N.R.; supervision, H.P., I.M. and N.R.; validation, H.P. and N.R.; visualization and draft writing, E.R.R. and I.K.M. All authors have read and agreed to the published version of the manuscript.

REFERENCES

- Adeella, L., & Rio, M. (2021). MSME digitalization, financial literacy, and financial performance: A study during the COvid-19 pandemic. In (Vol. 11, pp. 73-92): STIE Perbanas Press.
- Adetunji, O. M., & David-West, O. (2019). The relative impact of income and financial literacy on financial inclusion in Nigeria. *Journal of International Development*, 31(4), 312-335. https://doi.org/10.1002/jid.3407
- Albastaki, Y. A. (2021). When technology meets finance: A review approach to fintech. Innovative Strategies for Implementing FinTech in Banking, 1-21. https://doi.org/10.4018/978-1-7998-3257-7.ch001
- Ali, H., & Li, Y. (2021). Financial literacy, network competency, and smes financial performance: The moderating role of market orientation. The Journal of Asian Finance, Economics and Business, 8(10), 341-352. https://doi.org/10.13106/jafeb.2021.vol8.no10.0341
- Anah, L., & Ningsih, L. S. R. (2020). The level of Islamic financial literacy and the use of fintech on the financial inclusion of MSMEs in Islamic boarding schools in Jombang city. Jurnal BAABU AL-ILMI: Ekonomi Dan Perbankan Syariah, 5(2), 1-15.

Anderson, S., & William. (2011). Statistics for business and economics. China: South-Western.

Assefa, M. (2020). Implementation of branchless banking system as part of inclusive financial services: Expansion of technology acceptance model. Retrieved from

https://advance.sagepub.com/articles/preprint/Adoption_of_branchless_banking_system_as_part_of_inclusive_finan cial_services_extension_of_Technology_acceptance_model/13271483/1

Bhattacharya, A., & Chetty, P. (2020). A comparison of descriptive research and experimental research. Proyect Segurfo, 1-18.

- Bongomin, F., Gago, S., Oladele, R. O., & Denning, D. W. (2017). Global and multi-national prevalence of fungal diseasesestimate precision. *Journal of Fungi*, 3(4), 1-28. https://doi.org/10.3390/jof3040057
- Chen, R., & Divanbeigi, R. (2019). Can regulation promote financial inclusion? World Bank Policy Research Working Paper, No. 8711.
- Chuc, A. T., Li, W., Phi, N. T. M., Le, Q. T., Yoshino, N., & Taghizadeh-Hesary, F. (2022). The necessity of financial inclusion for enhancing the economic impacts of remittances. *Borsa Istanbul Review*, 22(1), 47-56. https://doi.org/10.1016/j.bir.2020.12.007
- Dakum, D., & Asari, A. (2020). The urgency of forming a fintech law as an effort to legalize fintech transaction dispute resolution in Indonesia. *Borobudur Law Review*, 2(1), 1-15.

- DiskoperdagBatu. (2020). Sectoral data from the office of cooperatives, micro enterprises, industry and trade in Batu City for 2017-2021. Retrieved from https://katalog.data.go.id/dataset/data-sektoral-dinas-koperasi-usaha-mikro-perindustrian-danperdagangan-kota-batu-tahu-2017-2021
- Eck, Van, N. J., & Waltman, L. (2019). VOSviwer manual version 1.6.10. CWTS Meaningful Metrics, No. January. Retrieved from https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.10.pdf
- El Amri, M. C., Mohammed, M. O., & Bakr, A. M. (2021). Enhancing financial inclusion using fintech-based payment system. Islamic FinTech: Insights and Solutions, 191-207. https://doi.org/10.1007/978-3-030-45827-0_11
- Fajar, M., & Larasati, C. W. (2021). The role of financial technology (Fintech) in the development of MSMEs in Indonesia: Opportunities and challenges. *Humanis (Humanities, Management and Science Proceedings)*, 1(2), 702-715.
- Fifaldyovan, M. I., & Supriyanta. (2021). Determinants of interest in fintech use. Jurnal Manajemen Pelayaran Nasional, 4(2), 11–17.
- Figueiredo, F., Gonçalves, M. J. A., & Teixeira, S. (2021). Information technology adoption on digital marketing: A literature review. *Informatics*, 8(4), 74. https://doi.org/10.3390/informatics8040074
- Financial Services Authority. (2019). OJK survey press release 2019: Financial literacy and inclusion index increases. Your Attitude, 7(2). https://ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Siaran-Pers-Survei-OJK-2019-Indeks-Literasi-Dan-Inklusi-Keuangan-Meningkat.aspx.
- Fintech Indonesia. (2021). Fintech Indonesia. Retrieved from https://fintech.id
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM)(2nd ed.). Thousand Oaks, CA: Sage Publications Inc.
- Hamid, M. S. F. (2015). Identification of employee competencies that affect the achievement of production performance at Pt. Nusantara clothing industry (Persero) with incentives as moderator variables study at PT. Industri Sandang Nusantara (Persero). Doctoral Dissertation, Thesis of Master of Management Program at Widyatama University.
- Hasan, I., & Habib, M. M. (2022). Mobile banking financial solution for blockchain-powered agri-food supply chain (ASC). International Supply Chain Technology Journal, 8(10), 1-2. https://doi.org/10.20545/isctj.v08.i10.02
- HC, R. H.-K. (2022). The role of financial literacy, access of finance, financial risk attitude on financial performance. Study on SMEs Jogjakarta. Jurnal Keuangan Dan Perbankan, 26(4), 805-819.
- Herdjiono, I., & Lady, A. D. (2016). Pengaruh financial attitude, financial knowledge, parental income Terhadap financial management behavior. Jurnal Manajemen Teori Dan Terapan | Journal of Theory and Applied Management, 9(3), 226–241. https://doi.org/10.20473/jmtt.v9i3.3077
- Hilmawati, M. R. N., & Kusumaningtias, R. (2021). Financial literacy and financial inclusion on performance and sustainability of micro small medium business sector. Nominal: Barometer Riset Akuntansi Dan Manajemen, 10(1), 135–152. https://doi.org/10.21831/nominal.v10i1.33881
- Huston, S. J. (2010). Measuring financial literacy. Journal of Customer Affairs, 44(2), 296-316. https://doi.org/10.1111/j.1745-6606.2010.01170.x
- Khan, F., Siddiqui, M. A., & Imtiaz, S. (2022). Role of financial literacy in achieving financial inclusion: A review, synthesis and research agenda. Cogent Business & Management, 9(1), 2034236. https://doi.org/10.1080/23311975.2022.2034236
- Leyshon, A., & Thrift, N. (1995). Geographies of financial exclusion: Financial abandonment in Britain and the United States. *Transactions of the Institute of British Geographers New Series*, 20, 312-341. https://doi.org/10.2307/622654
- Lyons, A. C., Grable, J. E., & Zeng, T. (2019). Impacts of financial literacy on the loan decisions of financially excluded households in the People's Republic of China. ADBI Working Paper Series. No. 923.
- Lyons, A. C., & Kass-Hanna, J. (2021). Financial inclusion, financial literacy and economically vulnerable populations in the Middle East and North Africa. *Emerging Markets Finance and Trade*, 57(9), 2699-2738. https://doi.org/10.1080/1540496x.2019.1598370
- Malagueño, R., Lopez-Valeiras, E., & Gomez-Conde, J. (2018). Balanced scorecard in SMEs: Effects on innovation and financial performance. *Small Business Economics*, 51(1), 221-244. https://doi.org/10.1007/s11187-017-9921-3

- Malinda, S., Masyita, D., Rahman, S., & Anwar, M. (2018). Financial literacy and work engagement as mediating variable to bank agent's performance. *European Research Studies*, 21, 503-518.
- Mancebón, M. J., Ximénez-de-Embún, D. P., Mediavilla, M., & Gómez-Sancho, J. M. (2019). Factors that influence the financial literacy of young Spanish consumers. *International Journal of Consumer Studies*, 43(2), 227-235. https://doi.org/10.1111/ijcs.12502
- Menne, F., Surya, B., Yusuf, M., Suriani, S., Ruslan, M., & Iskandar, I. (2022). Optimizing the financial performance of SMEs based on Sharia economy: Perspective of economic business sustainability and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(1), 18. https://doi.org/10.3390/joitmc8010018
- Mirzaei, M., & Buer, T. (2022). First results on financial literacy in Oman. *Managerial Finance*, 48(9/10), 1413-1429. https://doi.org/10.1108/mf-09-2021-0456
- Mujanah, S., Ratnawati, T., & Kusmaningtyas, A. (2019). The effect of competence, emotional quotient, and financial quotient on the business performance of small and medium enterprises in Surabaya, Indonesia. Paper presented at the 16th International Symposium on Management (INSYMA 2019). Atlantis Press.
- Musari, K., & Hidayat, S. E. (2022). Generation Z digital financial knowledge and behavior in Indonesia: Sharia fintech literacy survey towards digital financial inclusion. In FinTech Development for Financial Inclusivity. In (pp. 96-117): IGI Global. https://doi.org/10.4018/978-1-7998-8447-7.ch007.
- Nuryakin, N., Widowati, R., & Fatmawati, I. (2018). Network advantage: Mediating effect on business performance. *Scientific* Annals of Economics and Business, 65(4), 443-457. https://doi.org/10.2478/saeb-2018-0026
- OJK. (2022). 2022 national financial literacy and inclusion survey press release. Financial Services Authority, No. November. Retrieved from https://www.ojk.go.id/iru/policy/detailpolicy/9625/press-release-2022-national-financial-literacy-andinclusion-survey
- Orton, L. (2007). Financial literacy: Lessons from international experience. Ottawa, ON, Canada: Canadian Policy Research Networks.
- Ozili, P. K. (2021). Financial inclusion research around the world: A review. Forum for Social Economics, 50(4), 457-479. https://doi.org/10.1080/07360932.2020.1715238
- Putri, L. P., & Christiana, I. (2021). The role of financial technology in helping MSMEs in the midst of the covid-19 pandemic. *Ekonomikawan: Jurnal Ilmu Ekonomi Dan Studi Pembangunan*, 21(1), 57-63.
- Putri, N. K., Komara, K., & Setyowati, T. (2021). The influence of exchange rates, economic growth, inflation, and interest rates on foreign direct investment in Indonesia. *Jurnal Konsep Bisnis Dan Manajemen*, 8(1), 11-25.
- Raut, R. K. (2020). Past behaviour, financial literacy and investment decision-making process of individual investors. International Journal of Emerging Markets, 15(6), 1243-1263. https://doi.org/10.1108/ijoem-07-2018-0379
- Rohner, T. (2020). Georgia: Financial inclusion for micro and small business growth for credo, finca bank, and TBC bank (CDTA). Retrieved from https://policycommons.net/artifacts/403334/georgia/1372281/
- Salwaa, W., Putri, A. M., & Damayanti, S. M. (2020). How does financial technology affect financial literacy and financial inclusion of business owners in Indonesia. *Business Management, Economic, and Accounting National Seminar*, 1(1), 1059– 1076.
- Sanistasya, P. A., Raharjo, K., & Iqbal, M. (2019). The effect of financial literacy and financial inclusion on small enterprises performance in East Kalimantan. Jurnal Economia, 15(1), 48-59. https://doi.org/10.21831/economia.v15i1.23192
- Septiani, R. N., & Wuryani, E. (2020). The effect of financial literacy and financial inclusion on the performance of MSMEs in Sidoarjo. Doctoral Dissertation, Udayana University.
- Setyawan, W., & Mita, A. (2023). The effect of financial inclusion, financial literacy, financial technology on the performance of furniture SMES in Karang Bahagia Cikarang District. Prosiding SEMANIS: Seminar Manajemen Bisnis, 1(1), 385–390.
- Shrestha, C. B. (2022). Transparency and financial inclusion in Nepal's reconstruction. In Building Back Better After the 2015 Nepal Earthquake: Laying the Foundation for Resilience. In (pp. 41-56). Singapore: Springer Nature Singapore.

- Siska, E. (2022). Financial technology (FinTech) and its impact on financial performance of Islamic banking. ARBITRASE: Journal of Economics and Accounting, 2(3), 102-108. https://doi.org/10.47065/arbitrase.v2i3.338
- Sp, M. E., Riady, D. K., Majid, M. S. A., Marliyah, M., & Handayani, R. (2022). Study of literature financial technology, blockchain and Islamic finance. *International Journal of Educational Review, Law And Social Sciences*, 2(1), 21-32. https://doi.org/10.54443/ijerlas.v2i1.129
- Supramono, S., Stefanie, E., & Damayanti, T. W. (2020). Fostering financial inclusion: The determinants of the users behaviour of the smart act branchless banking service. Oradea Journal of Business and Economics, 5(2), 20-30. https://doi.org/10.47535/19910jbe108
- Tay, L.-Y., Tai, H.-T., & Tan, G.-S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon*, 8(6), e09766. https://doi.org/10.1016/j.heliyon.2022.e09766
- Tram, T. X. H., Lai, T. D., & Nguyen, T. T. H. (2023). Constructing a composite financial inclusion index for developing economies. *The Quarterly Review of Economics and Finance*, 87(C), 257-265. https://doi.org/10.1016/j.qref.2021.01.003
- Tristiarto, Y., & Wahyudi, W. (2022). Analysis of financial literacy and financial technology financial inclusion on personal finance for small and medium enterprises in Lebak Regency, Banten. *Ikra-Ith Ekonomika*, 5(1), 190–200.
- Wall, W. P. (2021). Determinants of SMEs' performance-from business strategy to innovation. Polish Journal of Management Studies, 23(2), 537-554. https://doi.org/10.17512/pjms.2021.23.2.32
- Wati, C. R., Sumiati, S., & Andarwati, A. (2021). The effect of financial knowledge on firm performance: The role of financial risk attitude as moderation. *International Journal of Research in Business and Social Science (2147-4478)*, 10(8), 236-249. https://doi.org/10.20525/ijrbs.v10i8.1450
- Widayanti, R., Damayanti, R., & Marwanti, F. (2017). The effect of financial literacy on business continuity in Jatisari village SMEs. Jurnal Ilmiah Manajemen Dan Bisnis, 18(2), 153-163.
- Yue, P., Korkmaz, A. G., Yin, Z., & Zhou, H. (2022). The rise of digital finance: Financial inclusion or debt trap? *Finance Research Letters*, 47(Part A), 102604. https://doi.org/10.1016/j.frl.2021.102604

Views and opinions expressed in this article are the views and opinions of the author(s), Journal of Socioeconomic Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.