THE INFLUENCE OF FINANCIAL LITERACY, FINANCIAL TECHNOLOGY, AND DIGITAL MARKETING ON INCREASING MSME INCOME IN THE CITY OF SURABAYA

PENGARUH LITERASI KEUANGAN, *FINANCIAL TECHNOLOGY,* DAN *DIGITAL MARKETING* TERHADAP PENINGKATAN PENDAPATAN UMKM DI KOTA SURABAYA

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ABSTRACT
This research aims to test and prove the influence of financial literacy, financial technology, and digital marketing on increasing MSME income. The population in this research is MSMEs that have gone digital in the city of Surabaya. The sampling technique in this study used simple random sampling, totaling 98 respondents. The analysis technique used in this research is the Structural Equation Model (SEM) on a Partial Least Square (PLS) basis using Smart-PLS 4.0 software. The results of this research prove that financial literacy, financial technology, and digital marketing have a significant effect on increasing MSME income.
Keywords: *Financial Literacy, Financial Technology, Digital Marketing*

INTRODUCTION

In this fast-paced era, living needs are increasingly high, which encourages people to increase their income. People try various ways to increase their income, one of which is opening a business, which is usually called a Micro, Small, and Medium Enterprise (MSME). MSMEs are a form of economic business that is productively independent and carried out by individuals or business entities, either directly or indirectly, which are not owned by subsidiaries or branch companies, whether from medium or large businesses (Undang-Undang Republik Indonesia Nomor 20 Tahun, 2008). In Indonesia, MSMs play an important in advancing the national economy. The important role of

MSMEs can be seen in efforts to reduce unemployment, poverty, and increase sources of income for the community and the Indonesian economy (Wicaksono & Widajantie, 2023). To increase income, MSME players need to have effective financial management and be careful in managing business finances.

Financial management includes understanding and implementing financial literacy concepts. Financial literacy is the knowledge and skills a person has to manage personal and business finances to achieve a level of financial stability (Kusumaningrum et al., 2023). Based on the National Financial Literacy Survey conducted by the Financial Services Authority, in

2022 the financial literacy level of Indonesian society will be at 49.68% (Otoritas Jasa Keuangan, 2022). Financial literacy in Indonesia is still relatively low compared to countries in the ASEAN region (Sukma et al., 2022). In 2023, OJK will focus on increasing the financial literacy of the Indonesian people. MSMEs are not only subjects for increasing financial literacy but are also contributors to community welfare and economic growth in Indonesia. Apart from having to master financial literacy, MSME players are expected to have the skills to develop innovations that can support increasing business income, one of which is using technology.

Technology and the internet are the main things in global change, which have a significant impact on aspects of people's lives, one of which is the economy. MSME players must be able to bring their businesses to collaborate with technology, especially in financial management. Current technological innovations in financial services are encouraging the emergence of a new phenomenon called financial technology. The presence of financial technology can help MSMEs carry out their business, one of which is recording finances in a more practical and structured way which can encourage increased income. In line with the rapid progress of technology in Indonesia, apart from utilizing technology in financial services, MSME players are also using technology as a form of innovation, especially in the marketing aspect.

Marketing is an important aspect in the business world to increase income. Marketing involves several activities related to sales, promotions, advertising, and pricing (Novita et al., 2022). In Indonesia, there are two marketing methods used by MSMEs, namely conventional methods (offline) and digital methods (online). Conventional methods require quite a lot of money because they have to create new outlets and provide space. Meanwhile, digital methods, or what is usually called digital marketing can utilize internet media to attract customers and optimize existing opportunities. Digital marketing is several activities that interact and are interrelated to facilitate relationships between producers of goods or services, distribution, and customers (Ramida et al., 2022). The use of digital marketing has a positive impact on efficiency and effectiveness in the marketing process by using fewer promotional operational costs, enabling an increase in product sales volume, thus creating a large opportunity to increase revenue. (Mianto et al., 2023).

MSMEs play an important role in supporting economic growth in several regions of Indonesia, including the city of Surabaya. Economic growth in Surabaya in 2021 will increase to 4.29% and in 2022 it will increase to 7.17%, thereby achieving the target of the Surabaya city government in its efforts to increase economic growth. (Pemerintah Kota Surabaya, 2022). The city of Surabaya has great

potential for the development of digital businesses or enterprises which opens up opportunities for MSME players to increase their income (Apriliani, 2023).

Diffusion of Innovation Theory

The theory of diffusion of innovation was first put forward by Everett M. Rogers in 1983 through his book entitled Diffusion of Innovation. Diffusion is defined as the process by which an innovation is communicated through certain channels over a certain period among the members of a social system. Innovation is a thought, practice, or thing that is considered or felt to be new by a person or group (Rogers, 1983).

The diffusion of innovation theory explains the innovation process that can be carried out in a field. The diffusion of innovation theory is linked to the field of financial literacy, financial technology, and digital marketing play an important role in increasing income through the process of spreading innovation. Financial literacy is the main foundation for understanding financial innovation, and financial technology as technological innovation for efficient financial services. Meanwhile, digital marketing is a digital marketing strategy that can be used to run a business. Increasing understanding of financial literacy, proper application of financial technology, and digital marketing can influence the adoption of innovation, so that it can make changes to income in the MSME sector.

Financial Literacy

Financial literacy includes skills in making financial decisions, discussing finances by considering risks, planning finances for the future, and responding to economic events in general financial matters. (Eferyn et al., 2022). Financial literacy skills have an impact on the way a person views economic conditions and play a role in making strategic decisions related to effective economic management and entrepreneurship.

Financial Technology

Financial technology can be considered as one of the innovations in financial services. Financial technology is a new financing concept that involves a combination of financial and technological aspects. Financial technology is not just financing or digital business models, financial technology also includes all services and products that are usually provided by traditional banks (Humaira & Ferayanti, 2022).

Digital Marketing

Digital marketing is a marketing strategy that involves technology. The increase in the world of the internet and technology means that digital marketing has now become a very popular strategy and is used by almost all MSMEs, making the internet a very profitable market. Digital marketing or digital marketing is an effort to promote and market brands using digital media (Ardani, 2022).

Income

Revenue is income obtained from services provided by a company which can include the sale of products and services to customers obtained in a company's operational activities to increase value or reduce liabilities arising in the delivery of goods or services. (Ekatama et al., 2023).

Conceptual Framework and Hypothesis

In the framework of thought, this describes the relationship between the variables studied, namely between the dependent variable and the independent variable. Based on the description above, in this research, financial literacy, financial technology, and digital marketing are independent variables. Meanwhile, the dependent variable is income. Therefore, the framework of thinking can be described as follows:
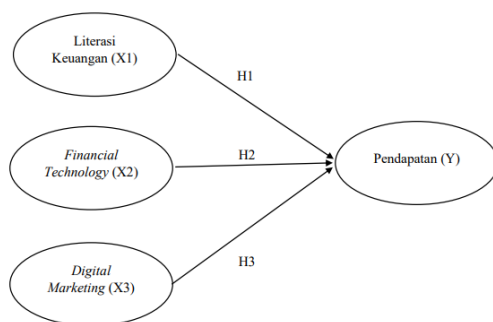

Figure 1 Conceptual Framework
Source: Data processed by researchers (2024)

Based on the formulation and objectives that have been explained, the hypothesis formulated by the researcher is as follows:

H1: Financial literacy has a positive and significant effect on increasing MSME income.
H2: Financial technology has a positive and significant effect on increasing MSME income.
H3: Digital marketing has a positive and significant effect on increasing MSME income.

RESEARCH METHODS
Data Collection Technique

The type of data used in this research is primary data. Primary data in this research are answers obtained from the results of distributing questionnaires that have been filled in by respondents. Data collection using an offline questionnaire was carried out by visiting MSMEs in several areas of the city of Surabaya.

Sampling Technique

This research used a simple random sampling technique. Simple random sampling is a technique for determining samples carried out randomly without paying attention to the strata in the population (Sugiyono dan Lestari, 2021). The sample in this study amounted to 98 respondents.

Data Analysis Technique

The analysis technique used in this research is the Structural Equation Model (SEM) based on Partial Least Square (PLS) and using Smart-PLS 4.0 software. SEM is a multivariate statistical analysis method developed from regression and path analysis (Subagiyo & Syaichoni, 2023). PLS can be used to analyze data with various types of measurements, including data that does not always follow a certain scale (Ghozali, 2021).

RESULTS AND DISCUSSION
Outer Model

The outer model was carried out to see the validity and reliability tests used to test how well the variable measuring instruments used were suitable as measurement tools in this research.

Validity Test
Convergent Validity

Convergent validity or convergent validity test is a test carried out to show the loading factor value on an indicator that will be declared valid. The value for convergent validity can be said to be valid if > 0.7 but the loading factor value can be tolerated and can be said to be valid if it is at 0.5 – 0.6.

Table 1 Convergent Validity Results

Variable	Indicator	Outer Loading
X1	X1.1	0.852
	X1.2	0.619
	X1.3	0.658
	X1.4	0.861
X2	X2.1	0.828
	X2.2	0.874
	X2.3	0.843
X3	X3.1	0.822
	X3.2	0.845
	X3.3	0.839
	X3.4	0.846
	X3.5	0.855
Y	Y.1	0.784
	Y.2	0.840
	Y.3	0.763

Source: Data processed by researchers (2024)

Based on this table, the results of the outer loading values for the research variable indicator values have a value of > 0.7 except for the indicators X1.2 with a value of 0.619 and X1.3 with a value of 0.658. However, the loading factor value of 0.5 to 0.6 is still acceptable and can be said to have fulfilled its validity. Based on the outer loading table above, all indicators have met convergent validity.

Discriminant Validity

Based on this table, the results of the outer loading values for the research variable indicator values have a value of > 0.7 except for the indicators X1.2 with a value of 0.619 and X1.3 with a value of 0.658. However, the loading factor value of 0.5 to 0.6 is still acceptable and can be said to have fulfilled its validity. Based on the outer loading table above, all indicators have met convergent validity.

Table 2 Discriminant Validity Results

	X1	X2	X3	Y
X1.1	0.852	0.360	0.173	0.284
X1.2	0.619	0.360	0.032	0.172
X1.3	0.658	0.369	0.022	0.143
X1.4	0.861	0.343	0.217	0.320
X2.1	0.418	0.828	0.183	0.281
X2.2	0.371	0.874	0.277	0.366
X2.3	0.378	0.843	0.184	0.317
X3.1	0.235	0.288	0.822	0.782
X3.2	0.077	0.237	0.845	0.843
X3.3	0.153	0.173	0.839	0.791
X3.4	0.086	0.229	0.846	0.835
X3.5	0.206	0.154	0.855	0.773
Y.1	0.279	0.336	0.741	0.784
Y.2	0.217	0.218	0.821	0.840
Y.3	0.285	0.368	0.721	0.763

Source: Data processed by researchers (2024)

Based on this table, shows that the loading value for the intended construct produces a number that is greater than for other constructs. It can be concluded that the indicators used in this research meet discriminant validity.

Average Variance Extracted (AVE)

The average variance extracted shows the amount of indicator variance

contained by other variables. An AVE value > 0.5 indicates good validity for the latent variable.

Table 3 Average Variance Extracted Results

Variable	AVE
X1	0.571
X2	0.720
X3	0.708
Y	0.634

Source: Data processed by researchers (2024)

It can be concluded that the variable constructs X1, X2, X3, and Y meet the valid criteria. This is indicated by the Average Variance Extracted (AVE) value for all variable constructs above 0.5. This means that each variable in this research is said to be valid and has good discriminant validity.

Reliability Test

Reliability testing is used in the final stage of outer model testing as a measurement of variable indicators from a questionnaire. Measuring reliability can be done in 2 ways, namely composite reliability and Cronbach's alpha. The composite reliability and Cronbach's alpha values must have a minimum value of 0.7.

Table 4 Reliability Test Results

Variable	*Composite Reliability*	*Cronbach's Alpha*
X1	0.839	0.754
X2	0.885	0.807
X3	0.924	0.897
Y	0.839	0.711

Source: Data processed by researchers (2024)

Based on this table, shows that the construct variables X1, X2, X3, and Y are declared reliable because they have composite reliability and Cronbach's alpha values above 0.7. The results show that all variable constructs have values above 0.7. So, it can be concluded that the variable construct has good reliability in this research.

Inner Model

Testing the structural model or inner model aims to see the relationship between variables. Inner model testing can be done as follows:

Coefficient of Determination (R²)

The coefficient of determination is a value that shows how much influence the independent variable has on the value of the dependent variable. The R-Square value can be said to be 0.67 which means strong, 0.33 which is moderate, and 0.19 which means weak. The following are the results of testing the inner model with R-Square:

Table 5 Coefficient of Determination Results

	R Square	R Square Adjusted
Y	0.948	0.946

Source: Data processed by researchers (2024)

Notes:
0.948 x 100% = 94,8%
100% - 94,8% = 5,2%

It can be seen that the value obtained is 0.948. These results show that 94.8% of variables X1, X2, and X3 influence variable Y, while the remaining 5.2% is influenced by other variables.

Hypothesis Test

In PLS, statistical testing of each hypothesized relationship is carried out using simulation. In this case, the bootstrapping method is used on the sample. Testing with bootstrapping is

also intended to minimize the problem of non-normality of research data. The results of testing with bootstrapping from PLS analysis are as follows:

Table 6 Hypothesis Test Results

Variable	T-Statistics	P Values	Results
X1→Y	2.721	0.007	accepted
X2→Y	2.115	0.035	accepted
X3→Y	23.395	0.000	accepted

Source: Data processed by researchers (2024)

DISCUSSION
The Influence of Financial Literacy on Increasing MSME Income
The first hypothesis states that financial literacy affects increasing MSME income. Based on the results of hypothesis testing through the bootstrapping procedure in Smart-PLS 4, it is stated that the T-Statistic value is 2,721, this value is more than 1.96 and the P-Values is 0.007, this value is smaller than 0.05. This means that H1 is accepted, meaning that financial literacy has a significant effect on increasing MSME income. Financial literacy provides benefits to MSME owners to maintain financial balance, with financial reports, expenses, and income recorded in detail so that they can increase MSME income. If financial literacy is low, it will have a bad impact on managing the business. General financial knowledge is also mandatory for every individual at the top of MSMEs to be able to master financial strategies in developing businesses to increase business income.

The Influence of Financial Technology on Increasing MSME Income
The second hypothesis states that financial technology affects on increasing MSME income. Based on the results of hypothesis testing through the

bootstrapping procedure in Smart-PLS 4, it is stated that the T-Statistic value is 2.115, this value is more than 1.96 and the P-Values is 0.035, this value is smaller than 0.05. This means that H2 is accepted, meaning that financial technology has a significant effect on increasing MSME income. This illustrates that the greater use of financial technology can enable an MSME to have good financial management so that it can increase income.

The Influence of Digital Marketing on Increasing MSME Income
The third hypothesis states that digital marketing affects on increasing MSME income. Based on the results of hypothesis testing through the bootstrapping procedure in Smart-PLS 4, it is stated that the T-Statistic value is 23,395, this value is more than 1.96 and the P-Values is 0.000, this value is smaller than 0.05. Thus, H3 means that it is accepted, meaning that digital marketing has a significant effect on increasing MSME income. This means that MSMEs must follow digital developments to market their products so that their businesses remain alive and keep up with the times. Digital marketing is currently a mandatory activity for MSME players in marketing their products to achieve maximum results to increase income

CONCLUSION
Based on the research results, it can be concluded that the results of this research are that variables of financial literacy, financial technology, and digital marketing have a significant effect on increasing MSME income. This means that increasing knowledge and application of financial literacy, financial technology, and digital marketing makes it easier and more

profitable for MSMEs to run their businesses. Based on the research that has been conducted, the limitations of this research are the use of data collection techniques in the form of questionnaires which can cause problems with careless filling in. Therefore, it is recommended that future researchers use data collection techniques that can control the results of respondents' answers directly.

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