

The Influence of Digital Literacy of Small Business Actors on The Level of E-Commerce Use in Blitar District

**Siti Azizah ¹, Arifatus Sholikhah ², Irfan H. Djunaidi ³, Diah Priharsari ⁴,
Mas Ayu Ambayoen ⁵, Siti Hamidah ⁶**
^{1,2,3,4,5,6} Universitas Brawijaya, Malang

Korespondensi penulis: siti.azizah@ub.ac.id

Abstract. *On a household basis, MSME businesses supported by the Livestock and Fisheries Agency in Blitar Regency are categorized as independent MSMEs. The decision was made to use e-commerce marketing as a strategy to grow the market and enhance the welfare of company players as well as the community. The study was carried out during June and July 2022. Research respondents were MSME business actors assisted by the Livestock and Fisheries Service from several OPS MSME members, PPMK Srikandi, AKBest product business, and "MuZa" smoked salted egg product business which spread across Blitar Regency. Regression analysis was utilized in the study to ascertain the impact of digital literacy on the adoption of e-commerce after data from a questionnaire was gathered. The study's findings show that the degree to which MSME business actors in Blitar Regency employ e-commerce is significantly positively impacted by their capacity to analyze various media types.*

Keywords: *Digital Literacy, Business, E-Commerce.*

INTRODUCTION

The digital era allows everyone to search and find various information on social media. The many types of features, applications, and social media offered to the public cause digital literacy knowledge to also need to be learned to maximize its use. Digital literacy is a form of effective thinking, the ability to understand and process information from various sources in digital form (Naufal, 2019). Several things can be obtained through digital literacy, such as stimulating the development of knowledge, improving individual skills in interpreting media texts and operating technology, and the ability to interact well between users and technology and between users and recipients of content (Restianty, 2018).

Increasing digital literacy should be accompanied by understanding media literacy and information literacy because it is a filter in processing social media content. According to Rahmi (2013), media literacy is the ability to understand, analyze and deconstruct media imagery. In a business, digital literacy is critical because currently, all business activities are not widely carried out face-to-face. The relationship between digital literacy and the proper use of social media can have an impact on business actors being better prepared to interact with consumers through social media and increasing the online business of business actors through the flow of visit information on online stores called "e-commerce" (Supradono, B and Ayu, 2011).

E-Commerce is the use of the internet for various business activities, including marketing business activities, promotions, public relations, transactions, payments, and others that are constantly developing along with E-Commerce technology itself. The effectiveness of e-commerce comes from providing sources of information, ease of access for potential consumers, and two-way communication that affects the smooth use of online systems (Arisandi, 2014). Business actors, including MSMEs, must adjust themselves to the convenience offered by the digital era, mainly because the products they have the opportunity to compete online.

Alzahrani (2019) mentioned that e-commerce benefits SME business owners, managers, and employees by helping them make strategic plans to improve their business. Erlanitasari and Rahmanto (2020) stated that SMEs in Indonesia (36%) are still conventional or face-to-face to market their sales, (and 37%) can use simple online media such as just using a computer. A small percentage (18%) can take advantage of online media (websites or social media) and less than one-tenth (9%) are online businesses that have optimally used e-commerce, while SMEs that can transact online is only (5%).

Blitar Regency is listed as one of the strategic areas with dynamic development. The attraction of potential wealth owned in Blitar Regency is natural resources and the production of abundant produce, livestock, and fishery products. Blitar Regency is also a promising area for business actors because it provides conveniences related to conducive business licensing supported by socio-political stability for guarantees for business actors and investors. This is reinforced by the statement of the Regent of Blitar in the Goes To Market event related to providing free permits for MSMEs on March 6, 2020; the Regent of Blitar Rijanto said that business legality is essential to expand the product market so that their business develops. Business license permits were given free of charge to as many as 254 MSME business actors to help business actors obtain assistance from the banking industry in the capital.

Most of the MSME businesses assisted by the Livestock and Fisheries Service of Blitar Regency are included in the side businesses with processed products made from livestock. The assisted MSME business actors already have their products in groups and individuals. The Livestock and Fisheries Service fosters MSME groups in marketing their products by involving several business actors in events, including bazaars, visits from foreign offices related to product exchanges, and curation cooperation with Indomarco (Indomaret) companies in marketing their food products. Product curation is selected with a strict selection process so that not all products of MSME business actors get the opportunity.

Sales of MSME products are expected to increase by using online media marketing and paying particular attention to the level of digital literacy of business actors through operationalizing technology. The most prominent thing is the influence of digital literacy on the understanding and use of social media (Sasmito and Prestianto, 2021). Currently, many MSMEs still have not been able to take advantage of e-commerce, which is allegedly due to the low level of digital literacy owned by MSME business actors. Based on this background, a study was conducted under the title "The Influence of Digital Literacy of MSME Business Actors on the Level of Use of E-Commerce in MSMEs Assisted by the Livestock and Fisheries Service of Blitar Regency." The objectives of this study are to 1). knowing the characteristics of MSME business actors Binaan Livestock and Fisheries Service in Blitar Regency, 2). knowing the level of digital literacy of MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency, and 3). analyze the influence of digital literacy on the level of e-Commerce use of MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency.

RESEARCH METHODS

The research method used is quantitative explanatory with data on MSME business actors OPS, Muza, AKBEST, and PPMK "Srikandi" of the MSME group assisted by the Livestock and Fisheries Service in Blitar Regency by explaining the influence between independent variables of the influence of digital literacy including respondent characteristics (X1), media literacy levels (X2), and socioeconomic and cultural (X3) on the level of use of e-commerce (Y). According to Sugiyono (2020), the quantitative explanatory method is a suitable method because it uses an instrument to determine the problem/potential of the problem and conducts a hypothesis theory study to make then conclusions based on the results of hypothesis testing.

Research Hypothesis :

X1. H1: The characteristics of a business with a business scale using superior unique products can increase the use of e-commerce.

X2. H1: The ability to evaluate various media can increase the use of e-commerce.

X3. H1: The socioeconomic culture with politics can increase the use of e-commerce.

Population and Sample

The population of this study is four groups of MSMEs with 20 individual MSME business actors who have processed livestock products under the guidance of the Regency Livestock and Fisheries Service Blitar. The research used the saturation sampling technique, which uses all members of the population as a sample when the population is relatively small. Because in this study, the sample used was MSME business actors who had processed livestock products, it could be determined by respondents used in the study using a sampling frame. It is known that the sampling frame is a list of all sampling elements in the research sampling population, which can be seen in Figure 1.

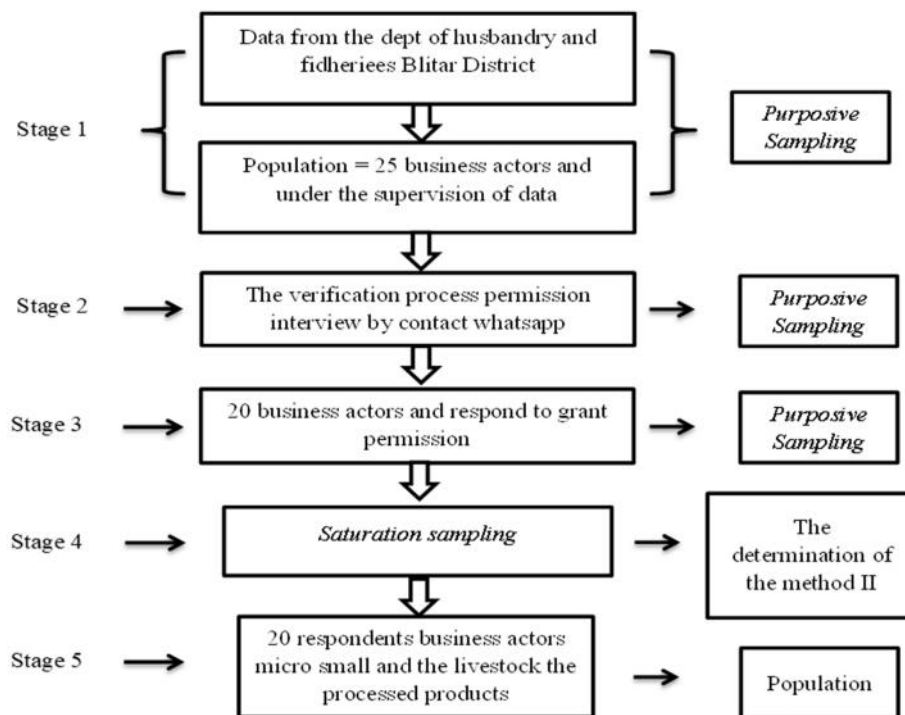


Figure 1. Sampling Frame

Data analysis

This study uses descriptive analysis in the form of an interval scale to determine the influence of digital literacy on the use of e-commerce. In the interval scale in the measurement of variables, the researcher obtains responses, or categorical responses, the value of one response is greater than other numbers (Budiastuti and Bandur, 2018). The interval scale can be known using the formula below:

Based on the interval scale formula, an example of an interval in the category of characteristic variables can be known with the following calculations:

$$I = \frac{5-1}{5} = 0,8$$

Information:

I : interval
5-1 : highest answer value – lowest answer value
5 : number of answer categories (score)
0.8 : interval in the study

The data obtained were then analyzed using multiple linear regression with the help of IBM SPSS Statistics software version 28 to answer the formulation of problems in the study using Test simultaneous (F-test) and partial test (T-test) to obtain conclusions from the study.

Characteristics of Business Actors

Characteristics are synonyms of character, which are universal values of human behavior, including man's relationship with His creator, nature, and others. Characteristics are realized through thoughts, attitudes, feelings, words, and actions. Character formation itself is influenced by hereditary factors (Samrin, 2016). Business characteristics are used to find an overview of the situation and background of business actors who will be interviewed as respondents.

Characteristics of business actors by age

Age is the time that passes from birth to the implementation of the study and is expressed in years. In this study, respondents were obtained. Namely, MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency of different ages can be seen in Figure 2.

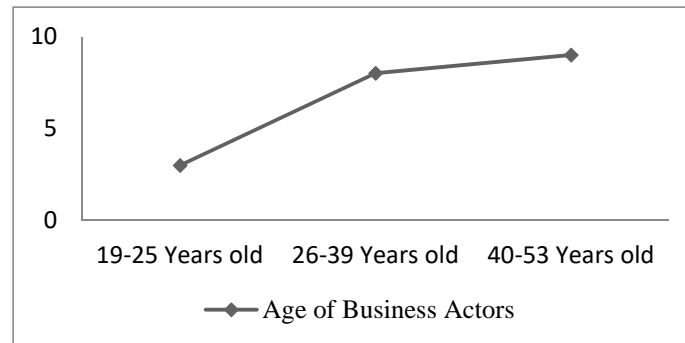
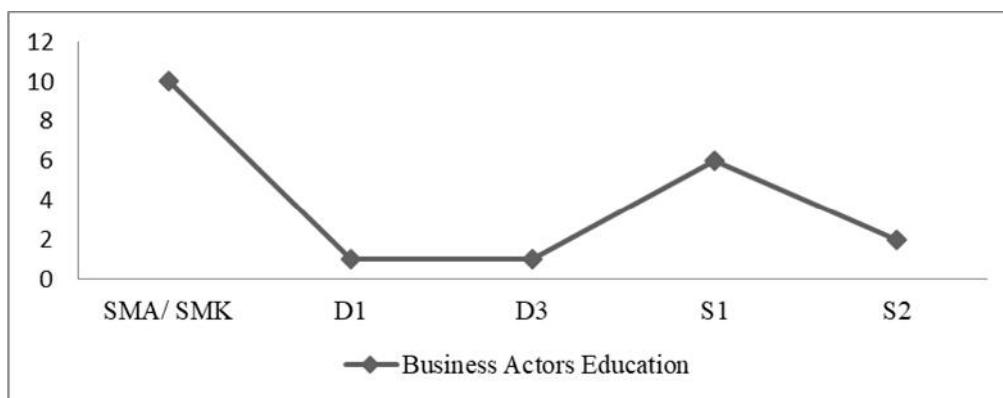


Figure 2. Age of Business Actors
Source: Primary data processed (2022)

Based on data from business actors in this study, it is known that the age of MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency is dominated by vulnerable aged 40-53 years. According to Keiku, Harsono, and Arif (2020), the maturity of business actors can affect the competitive performance of the market environment; there is a high performance that business actors can use to collect helpful knowledge in the context of effort. Maturity of age is a characteristic that includes the dimensions of ability. This dimension is a driver of high business performance because business actors can develop their capacity to run their business.

Characteristics of business actors based on education

Using technology as a marketing and sales tool can be very beneficial for entrepreneurs because it can expand the reach of marketing. The use of technology requires the ability and experience to use it; a person with a higher level of education will be better directed. In this study, the level of education was grouped into five scales, namely SMA/SMK, D1, D3, S1, and S2, where the results of the respondents' education levels in this study can be seen in Figure 3.



Figures 3. Business Actors Education
Source: Primary data processed (2022)

Based on data that has been obtained from respondents who are MSME business actors assisted by the Livestock and Perikanan Service in Blitar Regency, the research is dominated by business actors, with the last level of education for senior high school (SMA / SMK) being as much as 50% or as many as 10 MSME business actors. Irayani (2017) stated that education would produce quality human resources (HR). A well-educated person will act more directed because he has good skills that can be applied in the business area to influence the sustainability of his business. Seeing that with the research respondents who are dominated by the final high school education level as equal, MSME business actors assisted by the Livestock and Fisheries Service, in this case, are further improved again about knowledge in doing business using online store media, namely e-commerce in expanding its marketing so that it can increase the turnover of business actors with many orders from consumers outside the region, city and even outside the island.

Characteristics of business actors based on the main work

There are several types of work that produce goods, and there are jobs that provide services. In this study, MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency have main jobs that can be classified into 5 (five) job scales, namely as breeders, farmers, the private sector, providing services, and entrepreneurship, where the results of the research can be seen in Figure 4.

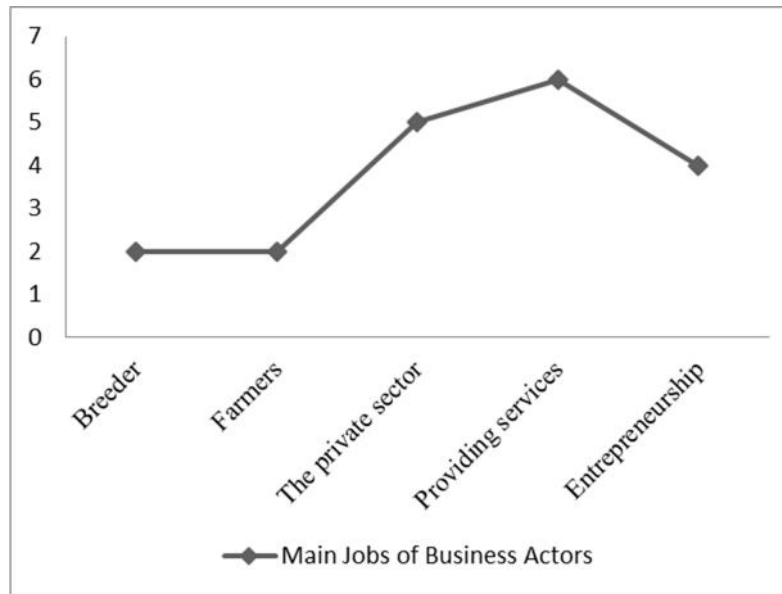
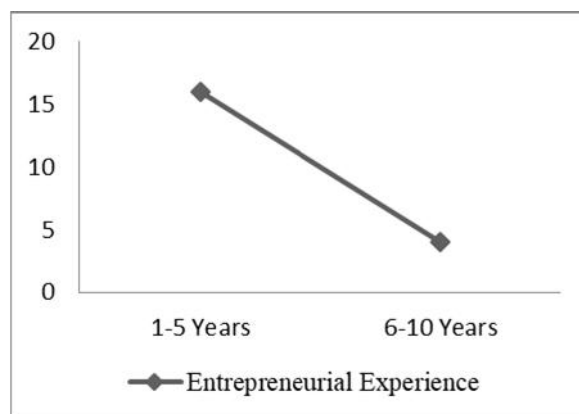


Figure 4. Main Jobs of Business Actors
Source: Primary data processed (2022)

Based on the data that has been obtained from respondents, MSME business actors already have the main job. The most dominant is in the type of work that provides services by 35% or by seven business actors, including (laundry and catering services). To increase their income, they try to carry out production activities that are carried out jointly and in groups to produce food products based on livestock. According to Kapisa et al. (2021), the main work is carried out continuously as the main activity, while the side job (secondary work) is carried out after the main activity is completed. Thus, MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency are categorized as MSME business actors as side businesses.

Characteristics of business actors based on entrepreneurial experience

Entrepreneurial experience can be explained by the length of time of the learning process of a business actor until now with a unit of time of year. In this study, MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency have different entrepreneurial experiences, as seen in Figure 5.



Figures 5. Entrepreneurial Experience
Source: Primer data processed (2022)

Based on the data obtained, 20 business actors with 1-5 years of entrepreneurial business experience get a more percentage value, which is 80%. Meanwhile, 6-10 years of entrepreneurial experience gets a smaller percentage value, as much as 20%. Entrepreneurial experience is obtained from business actors starting to know and pursue business ventures. According to research by Sunaryanto (2005) in Priyandikha (2012), the longer a trader runs his business, his knowledge also increases and affects his income level. The more time an entrepreneur devotes to the trading business, the greater the knowledge of consumer behavior and market behavior. Business skills improve, more business relationships, and customers are successfully acquired.

Characteristics of business actors based on income

The income of business actors can be seen from the net profit as the production is carried out. The income earned by MSME business actors can determine the scale of their business. The income obtained from all MSME business actors is different. The characteristics of business actors based on income can be seen in Figure 6.

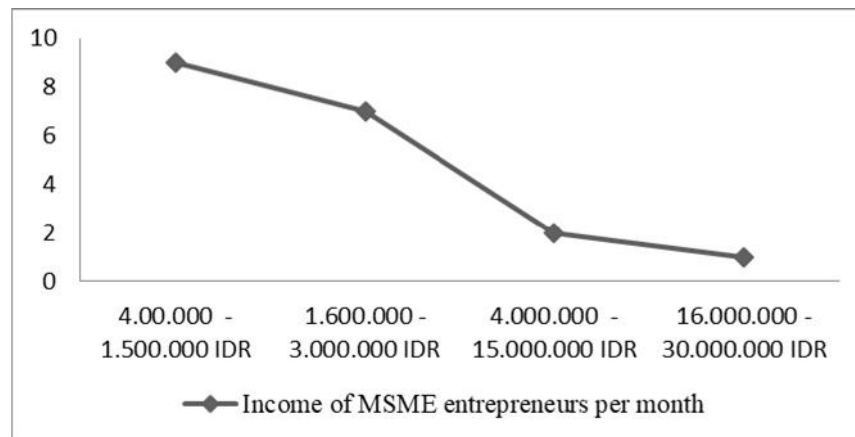


Figure 6. Income of MSME entrepreneurs per month

Source: Primary data processed (2022)

Based on the data obtained by the opinion per month, MSME business actors know that 47% have an income of 400,000 - 1,500,000 IDR/month, so the average income per year is less than 50,000,000.00 IDR. Thus all business actors are classified as small businesses. By article 6, paragraph (1) of the Law of the Republic of Indonesia Number 20 of 20, 2008, micro-enterprise criteria a) have a net worth of 50,000,000.00 IDR (fifty million IDR) excluding land and buildings for business premises, or b) have an annual sales proceeds of 300,000,000.00 IDR (three hundred million IDR). The category of small business actors of MSME business actors in Blitar Regency is a type of productive economy that stands alone or independently and is carried out by individuals. The advantage of this type of independent MSME can help absorb labor. Sarwono (2015) stated that independent MSMEs benefit the state or government in creating new jobs and work units to support household income.

Description of Research Variables

1. Business Characteristics

The business characteristics, according to Nisa and Muhammad (2020), are that the types of businesses are divided into small businesses and large businesses. Differences arise due to differences in the scale of the business, the source of capital or maximum income, and the legal personality of the business model or form of business.

Business characteristics are used to find an overview of the situation and business background in the level of use of e-commerce business actors.

2. Media Literacy Rate

Media literacy is an individual's ability to read printed and electronic media. Experts then define it in a broad concept. Baran (2009) argues that media literacy is a skill we accept, but like all other skills, this skill is developmental. Acritical thinking platform allows viewers to make independent decisions about media content, understand mass communication, and know about media's influence on people and society. Strategies for analyzing and discussing media messages. Thus, the level of media literacy is used to determine how MSME business actors ability can use online media such as e-commerce.

3. Socioeconomics and Culture

The relationship between the development of science and technology and cultural changes has never been separated. The two go hand in hand in the social and economic transformation process. Regarding development, science and technology can be considered vehicles for driving development processes with different characteristics (Baswir, 2003). Business activities cannot be separated from the environment around them. The role of the environment in business is to form ethics and social responsibility that will later be applied by the parties involved.

Results and Discussion of multiple linear regressionTable 1. Factors that influence the digital literacy of MSME business actors on the level of use of *e-commerce*.

Information	Regression Coefficient
Constant	0,734
X1.1 Length of Business	0,657
X1.3 Business Scale	-0,310**
X1.4 Business Form or Model	-0,673
X1.5 Incorporated	-0,024
X2.1 Media Utilization Capability	0,312
X2.2 Ability to Analyze	0,440
X2.3 Evaluating Ability	0,523**
X2.4 Message Producing Capability	-0,160
X3.1 Class of Society	0,661
X3.2 Ethnic Differences	-0,384
X3.3 Politics	0,177
X3.4 Business Considerations	-0,239
X3.5 Electronic Payments	0,279
R ² Adjusted = 89.8%	
R ² = 96%	
n = 20	
Fcount = 13.813	
*P < 0.10; **P < 0.05, ***P < 0.005	

Source: Primary data processed (2022)

Based on Table 31, it is known that the model of the equation formed from the results of multiple linear regression analysis is as follows:

$$Y = 0.734 - 0.310 + 0.523 + e$$

Interpretation of Significant Variables**Business Scale**

Partial test results for the Business scale variable (X1.3) showed that the regression coefficient value of - 0.310 indicated that a significant negative value ($p < 0.05$) affected the level of e-commerce usage. These findings accept hypothesis 1 that it is suspected that the scale of the business may increase the use of e-commerce, with the opposite influence. Business actors with types of products on the scale of processed livestock products with the most favored unique products are expected to increase the use of e-commerce.

The results show that each MSME business actor has a particular product and helps each other in marketing as a form of intermediary in marketing products. Compared to favoring only one particular type of product, the combination of processed livestock products can attract new consumers. The results of this study by Putri (2016) stated that the determinants of consumer satisfaction with manufactured products include physical attributes and non-physical attributes, such as price, seller name, and intermediary role in marketing or distributing products. A distribution intermediary is understood as a person or enterprise connecting the flow of goods from producers to consumers, both end consumers and industrial consumers. MSME business actors with processed livestock products that combine in marketing with different characteristics influence the level of use of e-commerce.

Media literacy rate based on media evaluation ability

The results of the partial test for the ability to evaluate variable (X2.3) showed that the regression coefficient value was 0.523. The magnitude of the coefficient of the ability variable to evaluate various media (X2.3), which was positively valued means an increase in the variable (X2.3) by 5% will increase the use of e-commerce (Y) by 52.3%, assuming the independent variable is of a fixed value. Thus hypothesis 3 is accepted, where the ability to evaluate various media (Google, Facebook, E-mail) can increase the use of e-commerce.

Data in the field shows that the level of media literacy in the ability to evaluate various kinds of media (online) can affect the level of use of e-commerce. MSME business actors can evaluate the differences between the online market (cyberspace, namely e-commerce) and the conventional market (the real world, namely marketing, still conventionally face to face). Business actors know the benefits of online marketplaces (e-commerce) that can make acquiring customers or consumers from outside the city and the island easier. In contrast, conventional marketing has limited customers. This is in accordance with Gavansha (2021), which state that e-commerce is a new way to identify and attract millions of potential customers at a low cost compared to the way conventional.

Table 2. Simultaneous Test F

Type	ANOVA				
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	449,917	13	34,609	13,813	.002 ^b
Residual	15,033	6	2,506		
Total	464,950	19			

a. Dependent Variable: Y
b. Predictors: (Constant), X3.5, X1.5, X1.3, X3.4, X3.2, X2.4, X2.3, X2.2, X1.1, X2.1, X3.3, X1.4, X3.1

Source: Primary data processed (2022)

Based on the data in the table above, the F value is 13.813 with a significance level of 0.002. The significance value is less than the real level of 0.05 (5%). If the calculated F value is greater than the table F ($13.813 > 3.24$), then it can be concluded that the free variables that include business characteristics (X1) consist of the length of the business, business scale, business form or model, incorporated. The level of media literacy (X2) consists of the ability to utilize media, the ability to analyze media content, the ability to evaluate various media, as well as the ability to process messages (create advertising content) and socioeconomic culture (X3) consisting of groups from society, ethnic differences, politics, business considerations, and electronic payments together, can affect the level of use of e-commerce (Y).

Table 3. Determination coefficient test R²

Model Summary				
Type	R	R Square	Adjusted R Square	Std. The error in the Estimate
	.984 ^a	0,968	0,898	1,583

Source: Primary data processed (2022)

Regression analysis in Table 3 obtained an Adjusted R² value of 0.898. This shows that the percentage of influence of independent variables on dependent variables is 89.8%. So that the variation of independent variables used in the model can explain by 89.8% to the variation of dependent variables, while the remaining 10.2% is influenced or explained by other variables.

Conclusion

The characteristics of MSME business actors in this study are: a business duration of 1-5 years, with an income cost of 3,082,105 ± 4,941,308 IDR with a source of privately owned fund capital, all MSME business actors have the primary job. MSME business actors know the form of business characteristics based on the ability of the level of media literacy that can increase the use of e-commerce without any pressure on socioeconomics and culture. Based on business characteristics on the scale of the business and the level of media literacy, the ability to evaluate various kinds of media has a significant positive effect on the level of use of e-commerce in MSME business actors assisted by the Livestock Service and Fisheries in Blitar Regency.

Suggestion

For MSME business actors assisted by the Livestock and Fisheries Service in Blitar Regency, they should master the use of e-commerce media well so that sales or transaction activities can be carried out remotely, so the products of MSME business actors are multiplying. It is hoped that the government can facilitate MSME business actors who make their business side by increasing their marketing through online media by providing special training for MSME business actors because, in research, there are no human resources who can create and operate e-commerce in acquiring new consumers or customers.

Acknowledgements

The research and community program is supported by MSME business actors assisted by the Livestock and Fisheries Service from several OPS MSME members, PPMK Srikandi, AKBest product business, and "MuZa" smoked salted egg business. Our gratitude to Directorate General of Higher Education of the Ministry of Education and Culture - the Republic of Indonesia that gave financial support for this study through "Doktor Mengabdi" project year 2022.

BIBLIOGRAPHY

- Arisandi, Y. T. 2014. The Effectiveness of E-Commerce Implementation in the Development of Small and Medium Enterprises in the Sandal and Wedoro Shoe Industry Center, Sidoarjo Regency. State Administration, pp. 1–8.
- Baran, S. J. and D. K. Dewi. 2009. Mass Communication Theory. Canada: Cengage Learning.
- Baswir, R. 2003. Heartless Development. Jakarta: Elsam
- Budiastuti, D. and B. Adhiyatma. 2018. Validity and Reliability of Research, Binus. Jakarta: Mitrawacana media.
- Fauzi, A. 2019. Sampling Method. Banten : 978-602-392-688-6.
- Gavansha, O. 2021. E-commerce Market: Digital and Digital Goods. A Journal Business Information System. 2 (3) : 1-13.
- Ghozali, I. 2016. Application of Multivariate Analysis with IBM SPSS 23 Program, BPFE Diponegoro University. Semarang.
- Irayani, I. G. A and A. A. K. Ayuningsari. 2017. Level of Education and Types of Products Towards the Utilization of E-commerce and Sales Turnover at MSMEs in Denpasar City. E-Journal of Economics. 10 (2) : 658-685.
- Keiku, A. N., Harsono and A. D. Hartanto. 2020. The Effect of Capital, Age, and Education on the Income of Micro-Scale Business Actors (Study of Street Vendors in Gading Kasri Village, Malang City). Journal of Regional Economica Indonesia. 1 (1) : 48-72.
- Naufal, H. A. 2019. Digital Literacy. Journal of Linguistics. 5 (3): 195–202.
- Nisa, and M. Ahmad. 2020. Sharia Economic Development through Micro, Small, and Medium Enterprises (MSMEs) in Tanjung Anom Village, Mauk District. Attack: 3M Media Works Attack.

- Priyandikha. 2012. Analysis of the Effect of Distance, Length of Business, Capital, and Working Hours on the Income of Convection Street Vendors (Case Study in Purwodinatan Village, Semarang City). Diponegoro University Journal of Economics and Business. 1–72.
- Rahmi, A. 2013. Introduction to Media Literacy in Elementary School Age Children. Sawwa: Journal of Gender Studies, 8 (2) : 261. doi: 10.21580/sa.v8i2.656.
- Restianty, A. 2018. Digital Literacy, A New Challenge in the realm of Media Literacy. Gunahumas, 1(1) : 72–87. doi: 10.17509/ghm.v1i1.28380.
- Samrin. 2016. Character Education (A Value Approach). Journal of Al-Ta'dib. 9 (1) : 122–123.
- Sasmito, Y. W. D. dan B. Prestianto. 2021. Analysis of Digital Literacy Levels and the Application of E-Commerce pthere are Micro, Small, and Medium Enterprises in Semarang city. Journal of Economics, Accounting Management and Taxation (Jemap). 4 (1): 145. doi: 10.24167/jemap.v4i1.3148.
- Sugiyono, P. D. 2012. Quantitative, Qualitative, and Action Research Methods. London: Alfabeta.
- Supradono, B. and A. N. H. Anaphy. 2011. The role of Social Media is for Relationship Management with Customers and there is a Bambang E-Commerce Service. Cytokine. 7 (2) : 33–45. doi: 10.1016/j.cyto.2015.08.063.