

## **Batik SMEs Digital Literacy Analysis on Digital Economic Readiness during the COVID-19 Pandemic**

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### **Abstract**

*This study aims to determine the effect of the level of digital literacy on readiness of community level for 2020 digital economy at Batik Small and Medium-sized Enterprises (SMEs). This study uses a quantitative approach with purposive sampling technique which determines 65 respondents in the Masaran, Sragen, Central Java Batik SMEs who have marketed the products through online using social media. The questionnaire was used to retrieve data. Descriptive analysis techniques and multiple linear regression were used to process the data. The results of the descriptive analysis show that the digital literacy level of the majority of Batik SMEs entrepreneurs is in the low category. The regression results indicate that digital literacy has a positive effect on the readiness of community level for 2020 digital economy with the level of gender, educational background, and internet networks as control variables, the higher digital literacy level owned by business people, the higher the community readiness to join the digital economy era which requires have the skills to use digital media also increase.*

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### **Article Info**

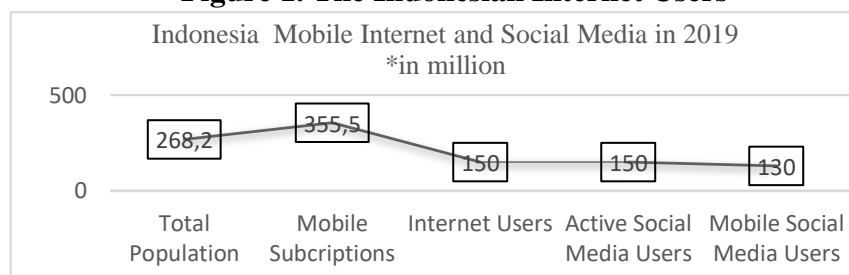
- **Received** :
- **Revised** :
- **Published** : 28<sup>th</sup> October 2021
- **Pages** : 193-206
- **DOI** : 10.33019/ijbe.v5i3.334
- **JEL** : B22, E32
- **Keywords** : *Digital Literacy, Digital Economic 2020, COVID-19, SMEs*



## 1. Introduction

Changes in human behavior patterns in the 4.0 industrial revolution which was marked by the shift in life activities to the online system made Indonesia the country with the largest growth in internet users in the world. The rapid growth of Indonesian internet users is supported by the fact that smartphone sales as a medium for accessing the internet in Indonesia have increased. The results of the We Are Social (2019) analysis show that with a total population of Indonesia 268 million, the number of mobile ownerships reaches 355 million, while internet users are half of the total population, which is around 150 million. The number of internet users is equal to the number of active social media users, and 130 million access social media using mobile devices (Figure1).

**Figure 1. The Indonesian Internet Users**



Source: [www.WeAreSocial.com](http://www.WeAreSocial.com)

Indonesia has the fourth largest number of startups in the world, this large number of startups is an indication that the sector that drives economic growth in Indonesia in the next era will be driven by the digital economy. This digital economy prediction is increasingly influencing people's economic life with the COVID-19 pandemic. The 2019-nCoV infection is an epidemic of disease with a low to moderate mortality rate, until now there is no standard treatment and proven drug to cure sufferers of the disease, supportive treatment and self-awareness for recovery are the only strategies, despite many experimental trials. is being carried out by a team of experts from various countries but the best way we can do for now is preventive measures, such as preventing the 2019-nCoV outbreak from spreading by wearing masks and not being in a large crowd outside the home. Stay at home is a slogan during the pandemic that has hit the entire world (Wu et al., 2020). The COVID-19 pandemic has paralyzed the physical activity of the Indonesian economy because it has prohibited the world's people from leaving their homes. All activities during a pandemic that are controlled from home provide opportunities for startups to develop online businesses without having to meet face to face.

The large potential number of Indonesian internet users brings innovation opportunities from entrepreneurs to take advantage of the internet network to get bigger income. The Micro, Small and Medium Enterprises (SMEs) sector is one of the most important elements in Indonesia's economic development. This SMEs activity is one of the businesses that can survive and revive the economy due to the monetary crisis in various economic sectors, the intense competition is what requires SMEs to think creatively and innovatively in their micro, small and



medium enterprises. According to Bank Indonesia (2019), the SMEs sector in Indonesia is divided into 9 sectors; Agriculture, livestock, forestry and fisheries, mining and quarrying, industrial processing, electricity, gas and clean water, buildings, trade, hotels and restaurants, transportation and communication, finance, leasing and corporate services, and services. One of the problems faced by SMEs in Indonesia is the marketing sector because most business actors do not have marketing skills, so their development (Syuhada and Gambetta, 2013).

Based on the distribution of islands, SMEs which are the largest internet users are in Java Island, amounting to 68.00 percent, the province with the largest number of SMEs using the internet is East Java Province at 101.32 thousand (23.41 percent), Central Java province amounting to 72.53 thousand (16.76 percent), and West Java province by 70.11 thousand or 16.20 percent (BPS, 2018). The results of these statistics conclude that the use of the internet to support the activities of micro and small industries is still low, only 10.15% of SMEs use the internet to support their business. Apart from capital, the main problem that often becomes an obstacle to the growth of micro and small enterprises (SMEs) is marketing, because SMEs not only produce but also must be responsible for smoothing the demand for their products. BPS (2018) also mentioned that the lack of internet use in SMEs due to the low level of education of entrepreneurs, most of whom only graduated from junior high school, is the reason why marketing in micro and small businesses is still traditional in nature. Various micro and small business sectors in Central Java Province also have obstacles in marketing that have not utilized digital information technology and are not followed by an increase in product quality.

In addition to banking credit, the presence of an online marketplace as a place to buy and sell online, brings solutions for SMEs to improve conventional marketing and expand market share. Survey of ecommerceIQ E-Marketplace Indonesia (2020) represents the products most popular with buyers in online buying and selling platforms or e-commerce in Indonesia in the 1st quarter of 2020, apart from electronic goods, fashion needs are still buyers' favorite. National economic recovery through the e-commerce trend is currently the choice of society. Apart from the best-selling products, the table above also concludes that the e-commerce platforms Bukalapak, Tokopedia, Shopee, JD.ID, Lazada and Blibli still dominate the Indonesian online market. Bain & Company (2020) through research results show that e-commerce gross merchandise value grew 23% per year between 2018 and 2020. The other insights from study also include that Southeast Asian consumer are buying into more categories online, especially grocery with 43% of respondents saying they now shop for packaged groceries via e-commerce. Ofcourse this is an opportunity for micro and small entrepreneurs who need markets to market their products without meeting physically during the ongoing COVID-19 pandemic, Batik SMEs were no exception, which was included in the textile industry category. Efforts to reduce poverty rates in Indonesia and Central Java Province in particular are closely related to the success of Micro Small and Medium Enterprises. Based on BPS data (2018) the existence of micro and small businesses contributes around 5.20 % in improving the economic conditions of people in Central Java



(jatengprov.go.id, 2020) this figure is comparable to a reduction in the poverty rate of 63,380 people. Based on data from the Ministry of Industry (2019), the existence of the batik industry growing in Indonesia contributed to an export value of IDR 251.86 billion during the first semester. The batik industry is dominated by small and medium size enterprises (SMEs) which are spread across 101 centers in Indonesia. The total number of businesses there is 47,000 business units and is able to absorb a workforce of more than 200,000 people.

**Table 1. The Number of Batik Entrepreneurs in Central Java**

No.	Cities / Regency	Total of Medium Entrepreneurs
1	Pekalongan City	1,100
2	Pekalongan Regency	168
3	Surakarta City	670
4	Sragen Regency	157
5	Semarang City	89

Source: The Office of Cooperatives and SMEs of Central Java Province (2019)

The recognition of Indonesian Batik from UNESCO as a world heritage in 2009 added value to the development of batik, especially the micro and small industries in the Masaran batik centers (Pilang, Kliwonan and Jati) which number more than 1,000 craftsmen. Masaran Batik Center is the largest batik producer cluster in Central Java for the Solo-Yogyakarta region. But opportunities in the digital economy require good digital literacy skills. With the digital literacy of Masaran Batik SMEs entrepreneurs, the level of readiness to face challenges and opportunities to participate in the digital economy era can increase. Digital literacy is defined in the Ministry of Education and Culture (2017) as knowledge and skills to use digital media, communication tools or networks in finding, evaluating, using, making information and utilizing it in a healthy, wise, intelligent, thorough, precise, and obedient manner. Based on several previous studies and the problems that occurred during the COVID-19 pandemic, this study aims to analyze whether the level of digital literacy owned by entrepreneurs at Masaran Batik SMEs affects the perception of readiness regarding the 2020 digital economy.

## 2. Literature Review

The new literacy covers Internet networks and other Information & Communication Technology (IT) has elements consisting of the skills, strategies and dispositions needed to successfully achieve, use and adapt to technology in the context of information and communication that is changing rapidly and always emerging with novelty. In our world until it ultimately affects all areas of our personal and professional life. This new literacy in the digital world enables us to use the Internet and other forms of ICT to identify important questions, seek information, evaluate the usefulness of information, synthesizing various information that has been obtained to answer questions and then communicating the answers to other people who have a relationship with the topic being solved (Leu et al., 2007).



Digital literacy provides broad access to increase knowledge. The sophistication of today technology also provides a platform to speak up and get your views heard. For women in developing countries, the internet is an open door to real benefits; develop business, education and job opportunities to improve the community economy. Gilster (1997) digital literacy is defined as the ability to understand and use information in various forms from a very wide variety of sources accessed via computer devices. Bawden (2001) offers a new understanding of digital literacy rooted in computer literacy and information literacy, digital literacy is more associated with technical skills in accessing, compiling, understanding, and disseminating information. So that digital literacy demands to have the ability to use various multimedia sources more effectively and related to knowledge, understanding and skills in using mass media.

Littlejohn et al., (2012) classified digital literacy elements are as follows, 1) Information literacy concerns how capabilities find, interpret, evaluate, manage, to share the information, 2) Digital scholarships include active participation in academic activities, for example in research practice, 3) Learning skills covers all-effective learning technology that has complete features for engagement both formal and informal teaching and learning processes, 4) ICT literacy or information technology literacy and communications that focus on how to adopt, adapt and use good digital devices applications and services, 5) Privacy management how to manage the online identity, 6) Communication and collaboration covers active participation in the digital network for learning and research, 7) Media literacy or media differentiation includes critical reading and creative communication skills academics and professionals in a variety of media.

Readiness is a person's condition as a whole which can make him ready to be able to respond or answer in a certain way to a situation he is facing. Then someone will adjust to these conditions and will influence or have a tendency to respond (Slameto, 2010). There are different types of readiness viewpoints related to the role of society and IT. Parasuraman (2000) defines readiness that involves technology as the tendency to use new technology to accomplish the goals of various jobs both at home and at work. The concept of technological readiness focuses on the openness of society to new technological information and its usability aspects. Kurniati et al., (2015) measuring the level of community readiness for industrial economic activities using the Community Readiness Model (CRM) which uses primary and secondary data with the following indicators; businesses owned by the community, knowledge of activities, leadership, community conditions, knowledge of current issues and sources of problems.

The 2020 digital economy is the basis for the government to make it the largest digital economy in Southeast Asia which focuses on development in the digital sector. In preparation for the digital economy competition, the government also targets e-commerce transactions to reach US \$ 130 billion and create 1000 *technopreneurs* with a business value of US \$ 10 billion by 2020 (Kominfo, 2019). To achieve this target, access to various business sectors including SMEs is needed





to strengthen the building of the digital economy ecosystem. However, there are quite a lot of problems in achieving this target, including changes in business models in various sectors from conventional to digital.

The research results of Erlanitasari et al., (2020) conclude that the government needs to socialize through the Go Online Indonesia SMEs movement by forming sustainable government and e-commerce collaboration as a strategic step to face digital energy competition of Asia in 2020, similar things are also recommended by Shofiana (2020) who explained that virtual technology was a solution to prevent the economic crisis during the COVID-19 pandemic. Widyastuti et al., (2016) and Ayuni (2019) also stated that digital literacy plays an important role in women's activities to support the economy in small and medium industries. Anggraini & Supriyanto (2019) state that strategic steps for strengthening MSMEs can be taken through increasing the frequency of training, comparative studies and intensifying assistance to groups regarding digital knowledge. Based on several studies and theoretical studies, the following hypothesis can be formulated:

- H1 : Digital literacy has a significant positive effect on the digital economy readiness of Masaran Batik SMEs entrepreneurs
- H2 : Gender affects the digital economy readiness of Masaran Batik SMEs entrepreneurs
- H3 : Educational background affects the digital economy readiness of Masaran Batik SMEs entrepreneurs
- H4 : Internet Networks affect the digital economy readiness of Masaran Batik SMEs entrepreneurs

### 3. Research Methods

#### Research Design

The design is quantitative research. The independent variables consist of the Digital Literacy (X1) while the Readiness of Community (Y) is the dependent variable. Gender (X2), Educational Backgrounds (X3) and Internet Networks (X4) are the control variables. Research location in Masaran district, Sragen, Central Java, Indonesia and the research was conducted in August-September 2020. The population was all entrepreneurs who are members of Batik SMEs in Masaran sub-district, Sragen, Central Java. The sample is part of the population studied, so that it uses a purposive sampling technique. The criteria used in determining the sample are Batik producers in Masaran Sragen cluster who have social media and use media digital as a marketing strategy. Based on the sampling technique, obtained 65 respondents from the villages of Pilang, Kliwonan, and Jati.

#### Data Collection Technique

**Table 2. The Research Instrument Indicators**

Operational Definition and Indicators		Items
Digital literacy (X1)	Refers to an individual's ability to find, evaluate, and compose clear information through writing and other media on various digital platforms	18 items



	(Littlejohn, et al (2012) <i>Information literacy, Digital scholarship, Learning skill, ICT literacy, Privacy management, Communication and collaboration, Media literacy</i>	
Gender (X2)	Refers to theory of most cultures currently construct their societies based on the understanding of gender binary –two gender categorizations (Nadal, 2017) <i>Male (Dummy=0) Female (Dummy=1)</i>	-
Educational Backgrounds (X3)	Based on formal education classification in Indonesia, divided into three levels: primary, secondary and tertiary education (UU RI No 20 th 2003) <i>Primary education (Dummy=0)</i> <i>Secondary &amp; Tertiary education (Dummy=1)</i>	-
Internet Networks (X4)	Refers to definition of internet as a global system to link various types of electric devices worldwide <i>Available (Dummy=1) Not Available (Dummy=0)</i>	
Readiness of Community (Y)	Refers to how community prepared to take action to face a particular problems (Kurniati et al., 2015) <i>Community enterprises, Community Knowledge, Leadership, Community condition, Knowledge of activity issues, Sources related to problems</i>	18 items

Source: Author (2020)

The data were collected using test and questionnaires where the respondents only choose the available answer. Questionnaire technique was applied by giving respondents a set of written statements and question to answer. The measurement of digital literacy (X1) used a five-point Likert scale (5 to 1) from “strongly agree” to “strongly disagree”, the number of points is counted and divided by all questions then multiplied by 100%. Respondent literacy were divided into three categories, high (more than 80%), given a score of 3, moderate (60-80%) given a score of 2 and low (<60%) given a score of 1 (Chen & Volpe, 1998).

All data on control variables were collected using a questionnaire that provide two answers, the respondents only chose the checklist (v) on the appropriate statement. While the level of community readiness is measured using 18 statements are only provided with two options “care” will be given point 1 and “don not care” will be given point 0, the readiness score in percentage is calculated by dividing the total points by all items then multiplied by 100%. Next uses the Community Readiness Model and to assess the community readiness factor using multiple regression methods. Before, the instruments were subjected to validity and reliability testing. The validity testing results show that all instruments were valid and had reliability coefficients > 0.7.

### Data Analysis Technique

The data obtained from the tests and questionnaires were then analyzed using descriptive statistics with the *IBM SPSS Statistics 17 for Windows*. The next



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analysis carried out was a regression analysis with the following structural equations:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Notes:

- Y = Readiness of Community Scores  
 X<sub>1</sub> = Digital Literacy Scores  
 X<sub>2</sub> = Gender  
 X<sub>3</sub> = Education Backgrounds  
 X<sub>4</sub> = Internet Networks  
 α = Constant  
 e = Error term which shows the uncertainty

#### 4. Results and Discussion

**Table 3. Respondent Characteristics**

Characteristic	n	%	Characteristics	n	%
<b>Level of education (n=65)</b>			<b>Age (n=65)</b>		
Primary education	22	33.85	31 and below	5	7.69
Secondary & tertiary education	43	66.15	32 and above	60	92.31
<b>Gender (n=65)</b>			<b>Marital status (n=65)</b>		
Male	25	38.46	Single	0	0.00
Female	40	61.54	Married	65	100.00
<b>Average Income- Covid-19 (n=65)</b>			<b>SME'S Category (n=65)</b>		
< 1.000.000 /day	55	84.62	Micro	52	80.00
>1.000.000 /day	10	15.38	Small and Medium	13	20.00
<b>Media Utilization Periods (n=65)</b>			<b>Internet Networks (n=65)</b>		
< 1 year	0	0.00	Available	56	66.15
> 1 year	65	100.00	Not Available	9	13.85
<b>Social Media Trends (n=65)</b>			<b>E-Commerce Trends (n=65)</b>		
WhatsApp	65	100.00	Tokopedia	12	18.46
Facebook	54	83.08	Shopee	20	30.77
Instagram	26	40.00	Bukalapak	11	16.92
Twitter	11	16.92	Lazada	7	10.77
Youtube	9	13.85	Blibli	5	7.69
Web & Blog	6	9.20	Others	24	36.92

Source: SPSS (2020)

Based on the characteristic table of respondents, it can be seen that the gender of female respondents is 61.54% while male respondents are 38.46%, the education level of most respondents is the secondary and tertiary level (SMP / SMA / SMK) of 66.15%. The availability of internet network is also in the range of 66.15%, the





majority of the respondents are over 32 years of age and all of them are married. Total 80% of respondents manage a Batik SMEs business in the “micro” category, while 20% of respondents manage a “small and medium” scale business. The average income of batik entrepreneurs on a micro and small scale is <1,000,000 IDR during the COVID-19 pandemic. All respondents have used digital media for more than one year. The social media trend is dominated by Whatsapp which is 100% used by the batik entrepreneur community in Masaran Sragen. Then the Facebook application was 83.03%, Instagram 40.00%, Twitter 16.92%, Youtube 13.85% while the last ranking was Web & Blog only around 9.20%. The general description of the tendency of the e-commerce platform used by the Batik Masaran entrepreneur community is still low, the percentage of online shopping application users who provide opportunities for batik producers to market their products has not been able to reach 50%. The highest e-commerce ranking achieved by Shopee was only 30.77%, followed by Tokopedia, Bukalapak, Lazada and Blibli in the last position at 7.69%. Meanwhile 36.92% of respondents are still random in choosing and using various e-commerce platforms available in Indonesia such as JD.ID, OLX, Elevania, Blanja dan Matahari Mall.

**Table 4. The Respondents' Digital Literacy (Agreement Responses)**

Digital Literacy Aspects Scores		Personal Digital Literacy Level (%)		
		Low	Medium	High
Information literacy	3.09		61.85	
Digital scholarship	2.81	56.10		
Learning skill	3.04		60.77	
ICT literacy	2.54	50.87		
Privacy management	2.62	52.31		
Communication and collaboration	3.93		78.62	
Media literacy	2.38	47.54		
<b>Mean correct responses all aspects</b>		<b>58.29</b>		

Source: SPSS 2020

**Table 5. The Personal Digital Literacy Level**

Category	Respondents	Percentage (%)
Low	38	58.46
Medium	27	41.54
High	0	0
	<b>65</b>	<b>100%</b>

Source: SPSS (2020)

Based on the results of the descriptive analysis of table above, it is found that the overall digital literacy level of the Masaran Batik SMEs entrepreneur community is still at a low level, especially aspects of media literacy, privacy management, ICT literacy, and digital scholarship. This presents that the batik entrepreneur community has not been able to filter information on social media and maintain social media privacy properly. It can be said that aspects such as optimizing the use



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of digital devices and the use of various digital practical applications have not been maximized. However, awareness of seeking information through the internet, frequently accessing news online, and using chat & video call applications that are more efficient have been able to be implemented by the Batik SMEs. This is evidenced by the score for the aspects of communication and collaboration, information literacy and learning skills which are at the medium level. While the digital literacy level of respondents when viewed from the aspect of personal literacy was 58.46% in the low level and 41.54% in the medium level (Table 5). It can be concluded that none of the batik entrepreneurs in Masaran SMEs have a high digital literacy level.

**Table 6. Readiness for Digital Economic 2020 Scale**

Community Readiness for Digital Economic (ED) 2020 Aspects	Caring Scores	Personal Readiness Level (%)		
		Low	Medium	High
Community concern for 2020 DE	59			90.77
Community understanding for 2020 DE	38	58.46		
Duration of community program	30	46.15		
<b>Mean correct responses “Community enterprises” aspect 65.13</b>				
Community awareness for 2020 DE	36	55.38		
Community knowledge for 2020 DE	27	41.54		
<b>Mean correct response “Community Knowledge” aspect 48.46</b>				
Role of the leader /government in digital activities	25	38.46		
Involvement of leader in relation activities	36	55.38		
Support from leader to an activity	40		61.54	
<b>Mean correct responses “Leadership” aspects 51.80</b>				
Community contribution for 2020 DE	36	55.38		
Obstacle activities inside for 2020 DE	43		66.15	
Community attitudes towards 2020 DE	30	46.15		
<b>Mean correct responses “Community condition” aspects 57.30</b>				
Availability of information related 2020 DE	34	52.31		
Availability of data related 2020 DE	34	52.31		
Public knowledge about 2020 DE	29	44.62		
Ease of getting information related 2020 DE	36	55.38		
<b>Mean correct response “Knowledge of activities” aspect 51.20</b>				
Community attitudes related 2020 DE issues	35	53.85		
Public support related 2020 DE	42		64.62	
Problem evaluation discussion about 2020 DE	45		69.23	
<b>Mean correct responses “Sources related to problems” aspects 62.60</b>				
<b>Mean correct responses all aspects 55.98</b>				

Source: SPSS (2020)

Table 6 demonstrate that the aspect of community business in dealing with digital economy issues is in the medium level (65.13%), the knowledge aspect of the community is at a low level (48.46%), the aspect of leadership is related to the care and support of leaders at the medium level, aspects of community conditions what the Masaran batik community cares most about are the obstacles and challenges related to the 2020 digital economy issue. The results of the analysis also describe that the level of public knowledge about the availability of information is still low.



Meanwhile, indicators of community support and evaluation of digital economy problems are aspects that the Masaran batik community cares about. Overall, the readiness level of the Masaran Batik SMEs regarding digital economy issues is still low (55/98%), this proves that there are still many indicators regarding digital economy issues that are not understood by the public. About 55.38% of Masaran batik entrepreneurs do not care about the essence of the digital economy, while 44.62% have a fairly good level of concern about digital economy issues (Table 7).

**Table 7. The Personal Readiness Level**

Category	Respondents	Percentage (%)
Low	36	55.38
Medium	29	44.62
High	0	00
	<b>65</b>	<b>100%</b>

Source: SPSS (2020)

From the regression test table, it can be seen that the R square value of 0.582 reveal that the digital literacy variable affects the community variable readiness 58.2%, while 41.8% is influenced by other variables that are not used as determinants in the study. The F statistics value of 20.843 with a significance level of 0.000 explains that simultaneously the digital literacy variable, gender, education and internet networks have an effect on the Batik SMEs readiness variable in the 2020 digital economy. This means that the digital literacy level of the Batik SMEs entrepreneur has a significant positive effect on the level of community readiness to participate in the 2020 digital economy. The results of this regression test accept the formulated hypothesis. While the coefficient value of the gender variable is 0.226, education 0.443 and internet networks of 0.372 with a significance level of <0.05, it can be explained that all control variables are able to control the relationship between the independent variable and the dependent variable. This displays that there are other variables that affect the level of readiness of the community in 2020 digital economic activities besides the digital literacy variable. The negative constant value -0.242 has the interpretation that if there are no digital literacy, gender, education and internet networks variables, the readiness level of the Batik SMEs community will decrease. The regression equation model in this study is as follows:  $Y = -0.242 + 0.180 X_1 + 0.226 X_2 + 0.443 X_3 + 0.372 X_4 + e$ .

**Table 9. Results of Regression Analysis**

Variable	Standardized Coefficients Beta	Std. Error	t-statistic	Sig.
Digital literacy	0.180	0.047	2.151	0.035
Gender	0.226	0.514	2.467	0.016
Education	0.443	0.523	4.896	0.000
Internet Networks	0.372	0.685	4.308	0.000
Unstandardized Coeff. (Constants)	-0.242			
Constant	-	2.575	-0.094	0.925
R-square	0.582			



Adjusted R-square	0.554			
F-Statistic	20.843			
Sig. F- statistic	0.000			
Note: Dependent variable: SMEs Batik Community Readiness				

Source: SPSS (2020)

## Discussions

The regression test table demonstrates that the coefficient of the independent variable is positive, it can be explained that digital literacy has a positive effect on the readiness level of entrepreneurs who are members of Masaran Batik SMEs. The higher skills of entrepreneurs in various digital aspects will lead to a higher level of readiness to face digital economy issues in the Covid-19 pandemic which has changed people's behavior to be online-based, including in marketing and distribution of goods. If respondents have knowledge of media, learning, information, communication, technology, and the internet, their level of concern for digital economy issues will increase. This concern refers to their understanding of the opportunities, obstacles, weaknesses and strengths that will be faced when the digital economy becomes a new culture in people's lives. This research confirms Shofiana (2020) who explains that virtual technology in SMEs is a solution to overcoming the economic crisis during the Covid-19 epidemic in Indonesia. These results also support the research of Salsabilah (2019) that digital literacy has a positive effect on SMEs entrepreneurs. Widyastuti et al (2016) also explained that digital literacy that focuses on female gender is able to bring change to the economy.

Apart from gender and educational background the internet network also controls the entrepreneurs who are members of Masaran Batik SMEs for communicate in multimedia and try to involve digital media to market products, its users can exchange messages in the form of text, visual, audio, to audio-visual (video). Through the internet too, information can spread faster and wider than the media predecessor. An information that occurs in a part of the world, can recognized quickly by people in other parts of the world. Digital literacy provides broad access to increase knowledge. The sophistication of today's technology also provides a platform to speak up and get your views heard. For women in developing countries, the internet is an open door to real benefits; develop business, education and job opportunities to improve the community economy.

## 5. Conclusion and Suggestion

Based on the analysis that has been carried out, it can be concluded that digital literacy has a positive effect on the readiness of the community in facing the 2020 digital economy issue at Masaran Sragen Batik SMEs, the low level of digital literacy of entrepreneurs in Batik SMEs is directly proportional to the level of entrepreneurial readiness which is still low. The relationship between digital literacy variables and community readiness is controlled by the variable gender, educational background, and the internet network. The implication is that it is very important to increase digital capabilities and knowledge for Small Medium-size Enterprise (SMEs) entrepreneurs to be able to compete in a digital economy that



requires everything to be online based, especially during the Covid-19 pandemic. Measuring the level of readiness in research still has weaknesses, for further research it is suggested to improve the limitations of research by adding variables that are thought to have a strong influence on people's readiness to face the digital economy by using the interview method so that research data is more accurate.

## 6. Acknowledgement

This research is partly supported by the Masaran Batik Tourism Village in Sragen Regency and the Central Java Tourism Office. We are grateful to our colleagues from the MAKSI 2019 team, FEB Sebelas Maret University for providing insight and expertise that greatly assisted the research process, even though they may not agree with all interpretations of this study. For the last, thank you to Ria Batik Solo and its owner Koko Yohan, who have provided a lot of inspiration in writing this – scientific articles.

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