

The Importance of E-Commerce on The Development of Micro, Small and Medium Enterprises (MSMEs) in The Rural Area During Covid-19

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Abstract: The Covid-19 pandemic that has been spreaded on March 2020 in Indonesia has greatly affected the economy and changed the nature of business in Indonesia. The new normal has led to a surge in e-commerce and digital transformation. However those who live in rural areas could not take advantage of this transformation, as they have very minimal access and knowledge about digital literacy. The researchers believe one way to make them know and understand about this matter is through training. Thus, this study aims to understand the importance of e-commerce training on the development of micro, small and medium enterprises (MSMEs) in the field of creative industry in the rural area during Covid-19 Pandemic, using a case study in Biak Numfor, Papua. The analysis is based on a qualitative study using focus group discussion toward 6 women, who have MSMEs in the creative industry in Biak Numfor and have joined e-commerce training. The study assessed that the training is important and provides an understanding about the importance of e-commerce and its significant to help their business development. The results are expected to be able to contribute frameworks and ideas to the community, government, and MSMEs players associated to the importance of e-commerce and the training on the development of MSMEs in the rural area during Covid-19.

Keywords: *e-commerce, MSMEs, Covid-19, rural area*

1. Introduction

The emergence and rapid spread of Covid-19 around the world has been infecting millions and greatly affected the global economy. It steadily has changed the nature of economic activity and has brought economic deprivation as many countries imposed lockdown and tight restrictions on movement to cease the spread of the virus. According to a research on economic activity during Covid-19 pandemic, 52% of consumers avoid shopping activities and crowded areas. Furthermore, 36% avoid shopping activities until they are vaccinated (Bhatti et al., 2020). In the midst of face to face economic activity halt, Covid-19 has led to a surge of digital economic transformation and e-commerce (UNCTAD, 2021). The new normal has pushed producers, businesses and consumers to go digital, selling and buying goods online. Thus make the global market of e-commerce rise from 14% in 2019 to about 17% in 2020 (UNCTAD, 2021).

Micro, Small and Medium Enterprises (MSMEs) in Indonesia

Micro, small and medium enterprises (MSMEs) in developing countries play a major role in the economic and social sector. The domestic economic activities in Indonesia are highly influenced by MSMEs due to their ability to absorb large number of productive labourers, their wide distribution across the country including rural areas, and business opportunity for women. MSMEs were accounted for more than 95% of total companies and total workers (Tambunan, 2019). The definition of MSMEs in Indonesia is arranged by Law Number 20 in 2008 on Micro, Small and Medium Enterprises. Micro-enterprise (MIE) is a productive business owned by an individual or a business entity with total net worth of no greater than IDR 50 million exclude land and building assets, and annual sales of under IDR 300 million. Small enterprise (SE) is an independent productive business owned by an individual or a business entity that is neither a subsidiary, company branch nor a part of a medium or large enterprise with total net worth from IDR 50 million to IDR 500 million, and annual sales of IDR 300 million to IDR 2.5 billion. Medium enterprise (ME) is a productive business owned by an individual or business entity that is neither a subsidiary, company branch nor a part of a small or large enterprise with total net worth of IDR 500 million to IDR 10 billion, and annual sales of IDR 2.5 billion to IDR 50 billion (UU No. 20 Tahun 2008, 2008)

A number of studies from (BI, 2016) and (Tambunan, 2019) conclude the key profiles of MSMEs through field and statistical studies. The profiles suggest that the MIEs mostly operate using traditional business management, manual production processes, local market orientation, many are managed or owned by women with low economic status and education, and no utilization of information technology (IT) as shown in Table 1. In 2021, the number of MSMEs in Indonesia reached 64.19 million with 99.92% composed of MIEs and SEs (Bahtiar, 2021).

Table 1 Key Profiles of MSMEs in Indonesia

No	Aspect	MIEs	SEs	MEs
1	Formality	Low formality degree	High formality degree	All are operated in the formal sector
2	Organizational management	Traditional management system	Mostly utilize modern management systems	Full utilization of modern management systems
3	Workers	Mostly are unpaid family members and acquaintances	Mostly are wage-paid employees	All wage-paid employees
4	Production	Manual / traditional	Mostly mechanized	Automated
5	Market orientation	Mostly are local oriented	Local, national and/or export	National and export
6	Owner's economic and educational status	Low income and low education	Many are middle income and well-educated	Mostly are middle to high income and well-educated
7	Technology utilization	No utilization of information technology (IT)	Utilization of information technology (IT)	Utilization of modern information technology (IT)

8	Owner's gender	Many are managed / owned by women	Less women as owners	Very few women as owners
9	Motivation for business	Mostly are to survive or as side incomes	Mostly for profit	Fully for profit
10	Entrepreneurial spirit	Mostly low	Mostly high	All high

Source: Bank Indonesia (2015), Tambunan (2019)

According to a statistical study by (BPS, 2017) more than half of micro and small enterprises (MSEs) operate in Java compared to other islands. As shown in Table 2, Java takes the highest percentage of MSEs at 60.7%, Papua and Maluku have the lowest percentage at 1.8%. Furthermore, despite MSMEs taking 97% of all firms, their contribution towards Indonesian GDP was below 62% which demonstrates low productivity due to lack of skilled human resources, capital, and advanced technologies (Tambunan, 2019).

Table 2 MSEs Distribution By Island in 2016 (%)

Island	MSEs
Java	60.7
Sumatera	18.6
Sulawesi	8.1
Kalimantan	5.1
Bali and Nusa Tenggara	5.7
Papua and Maluku	1.8

Source: BPS (2017), Tambunan (2019)

Micro, Small and Medium Enterprises (MSMEs) In Indonesia During Covid-19 Pandemic

The Novel Coronavirus (Covid-19) outbreak was initially identified in December 2019 in Wuhan city, China (Fauci et al., 2020). Since then, there are 190,671,330 confirmed Covid-19 cases and 4,098,758 reported deaths globally, and the outbreak has become a global pandemic (WHO, 2021). In Indonesia, there are 2,950,058 confirmed cases and 76,200 reported deaths due to Covid-19 (KPCPEN, 2021). The pandemic has caused global health, social, and economic crises, especially in developing countries including in Indonesia. The MSMEs in Indonesia are largely affected and the turnover rate has significantly decreased since the end of 2019 due to lockdowns, activity limitations, and social distancing. According to (Katadata Insight Center, 2020), 82.9% of 206 MSMEs were negatively affected, 63.9% experienced a decrease in turnover rate, and 37.4% did not survive after a year prior to the pandemic.

MSMEs are experiencing difficulties in buying imported raw materials, delay in production and distribution, decreasing number of buyers paying the loans, bills, and employees' wages, which ultimately results in layoffs, downsizing, and bankruptcy. The consumers' behaviour has shifted into home activities, the utilization of digital technology, and attraction to businesses that offer hygiene, low touch, less crowd, and low mobility. The government has encouraged MSMEs to get on board with digital platforms through various

programs, for example the ‘Proudly Made In Indonesia’ and the ‘Online Sale Day’ programs to increase sales and improve businesses (Bahtiar, 2021).

E-Commerce in Indonesia

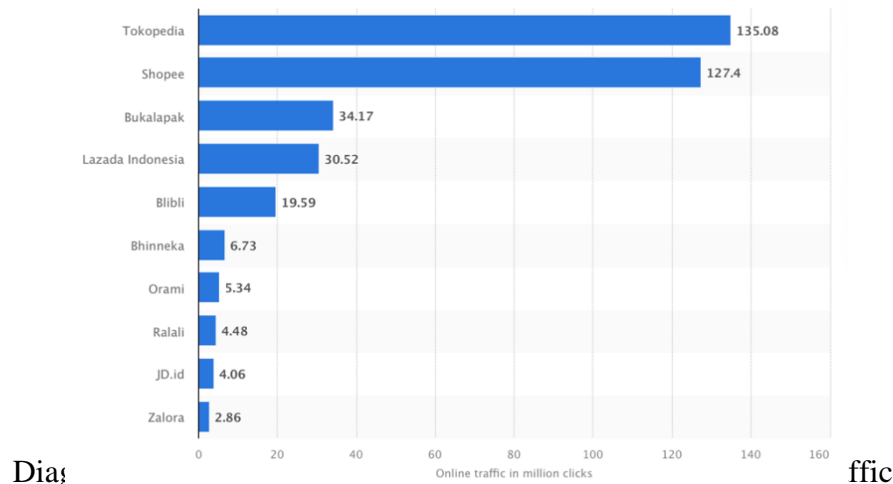
Indonesia is one of the largest and most enthusiastic markets for e-commerce in the world. In 2017, there are approximately thirty million online shoppers with USD 5 billion of formal e-commerce and more than USD 3 billion of informal e-commerce. The market is projected to grow from USD 8 billion to USD 40 billion in 2022 (Das et al., 2018). E-commerce in Indonesia is classified into six categories: online listing, online marketplace, online shopping mall, web store, social media store, and crowdfunding (Pradana, 2015). The characteristics of each category are shown in Table 3.

Table 3 E-Commerce Classifications In Indonesia

No	E-Commerce Classification	Description	Example
1	Listing	An online platform where individuals are able to sell goods free of charge and pay for premium advertisement when desired.	www.olx.com www.berniaga.com
2	Online marketplace	An online platform that enables users to purchase, sell, and promote products, as well as facilitating online payments	www.tokopedia.com www.shopee.com www.bukalapak.com
3	Online shopping mall	An online platform similar to online marketplace, however the brands are curated and required to go through selective verification processes	www.bobobo.com www.masari.com www.istyle.id www.mapclub.com
4	Web store	An online store which has its own web domain where the seller market and sell its own products or services.	Any web store
5	Social media store	A social media account which is utilized as an online store and a marketing platform	www.facebook.com www.instagram.com www.twitter.com www.tiktok.com
6	Crowdfunding	An online platform where users are able to raise funding from people whose passions and needs are in line with the offered products or projects.	www.kolase.com www.akseleran.com www.kickstarter.com www.indigogo.com

Source: (Pradana, 2015)

According to (Nurhayati-Wolff, 2021), the ten e-commerce with the highest traffic in Indonesia are online marketplace with Tokopedia, Shopee and Bukalapak as the top three leaders as shown in Diagram 1.



(Nurhayati-Wolff, 2021)

E-Commerce Growth In Indonesia During Covid-19 Pandemic

The Covid-19 pandemic has shifted consumers' purchasing preferences towards the online platforms, consequently the e-commerce sectors are experiencing rapid growth and opportunities (Larasati et al., 2021). However, despite the vast rapid e-commerce growth in Indonesia, most MSMEs especially in rural areas which operate in conventional ways are not accustomed with e-commerce and technology, hence they experience major decline in their businesses. In contrast, the finding from a study based by (Larasati et al., 2021). showed that the majority of online marketplace users are microenterprises (MIEs). The MIEs' increase in total revenue is higher than the MEs', which demonstrates a positive growth of MIEs in the online marketplace. Tokopedia gained 2.3 million new MSMEs in August 2020 from the year before, whereas it needed 10 years to acquire 6 million partners before Covid-19 pandemic. Online marketplace offers flexibility and wider range of sales compared to conventional business channels. Therefore, the utilization of digital marketing and its integration with online marketplace could be the key solution to revive the MSMEs during and post Covid-19 pandemic (Santoso, 2020).

2. Research Method

This study is designed to understand the importance of e-commerce training in the rural area in order to develop MSMEs in the creative industry sector during Covid-19 Pandemic, using a case study in Biak Numfor, Papua. The researchers want to answer the question of whether or not e-commerce training helps to develop and grow the participants' businesses and how e-commerce training helps to develop and grow the participants' businesses during Covid-19 Pandemic. To achieve comprehensive results and be able to answer those questions, the researcher uses qualitative research on the case study in Biak Numfor using focus group discussion.

To explain the significance of the program, the researcher begins with an assumption and theoretical framework (Creswell & Poth, 2018). The theory subsequently examines using

observation on the training and focus group discussion after training with targeted sampling for data collection. Collective data collection conducted in a natural setting to specific people and places under study, which is in Biak Numfor, Papua. Data were collected from six MSMEs owners in Biak Numfor, who had attended e-commerce training held by Wahana Visi Indonesia in cooperation with local government, Samsung International and the Fashion Product Design and Business, Universitas Ciputra. The focus group discussion was conducted three days after the training was completed. The samples were randomly picked from different genders and businesses in the creative industry. The research aims to analyse the discoveries to display explanations of the problem, to contribute to the literature and to answer the challenge for the better (Creswell & Poth, 2018).

E-commerce training program for MSME was held three days on May 17-19th, 2020 in Biak Numfor, Papua. It is a new program that was created and held by Wahana Visi Indonesia in cooperation with local government, Samsung International as the sponsor and the fashion product design and business, Universitas Ciputra as the trainer and mentor. 25 participants come from Biak Numfor, Papua, were joined in these training. The participants had to take three days of training and mentoring, which learned about e-commerce and its marketing system whose purpose is to increase sales and their businesses' marginal profit. The training begins with an explanation of the importance of e-commerce and potential market share that can be accessed in digital market through online stores, marketplaces and social medias. The participants are also got to know about e-commerce, the platform and its feature in Shopee and Tokopedia also related selling space in social media like facebook and instagram, the techniques for a good e-commerce page and step by step to create and run online business. In addition, they are trained and mentored from the registration process, create an account, store, make good presentable images, and run the online store. The program was manufactured because of the necessity to make MSMEs in rural areas, such as in Biak, be able to understand and practice e-commerce in order to develop and grow their businesses in the midst of Pandemic.

Table 4 Focus Group Discussion Questions

Topic	Question
The importance of e-commerce on the development of MSMEs in the rural area during Covid-19	Do you face any difficulty on the development of your business during the Covid-19 pandemic? What is the biggest problem you faced? Explain in detail!
	Before the e-commerce training, do you know, familiar or using any platform e-commerce and social media for your business?
	After the e-commerce training, do you know, familiar or using any platform e-commerce and social media for your business?
	Do you think the E-commerce training useful and would help you to develop your business in the midst of Covid-19 pandemic?
	What is the most important and useful topic on the training that would help your business grow?
	Do you have any opinions, critics or suggestions about the e-commerce training or future training that you

	need during covid-19?
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Table 5 Focus Group Discussion Participants

No.	Name	Gender	Business Sector	Size of Business
	Ferry Manggombo	Male	Wooden kitchen tools and fashion accesories	Small and Medium
	Udiana Awarawi	Female	Recycle bag from plastic waste	Micro
	Yubelius Usior	Male	Packed fish	Small and Medium
	Nitha Sroyer	Female	Hand-made bag	Micro
	Poppy Mambor	Female	Cake	Small and Medium
	Linda Rumbrapuk	Female	Recycle decoration from plastic waste	Micro

3. Results and Discussion

MSMEs owner from Biak Numfor who joined e-commerce training program in May 2021 were questioned about four main subjects; (1) The participants difficulties and problems during covid-19 pandemic (2) The participant's understanding about e-commerce before attending e-commerce training program, (3) their understanding about e-commerce after attending e-commerce training program, (4) the importance and the result of attending e-commerce training due to answer their problem. To answer those four main questions, qualitative approach was necessary to conduct. Thus, some findings have been identified that e-commerce training program contributed to a positive impact on MSMEs in Biak Numfor during Covid-19 pandemic.

All six focus group discussion participants were agreed that Covid-19 Pandemic has effected and made big downfall on their businesses, mostly on sales. All participants' business went down from 50% to 70% in sales. Those happened because their main business activity was offline, which required physical interactions and face to face settings. Whereas, Indonesian Government imposed tight restrictions on daily movement during the Covid-19 pandemic to cease the spread of the virus. Ferry Manggombo says: "The biggest difficulty I face during the pandemic is sales, as I usually make business transaction at the local market and exhibitions." While Poppy Mambor said she lost 70% of sales during the pandemic. Correspondingly It was stated by The World Bank at Global Economic Outlook 2020 that The Covid-19 pandemic is expected to make most countries' economic activity halt and dangerously fall into economic crisis (The World Bank, 2020)

Despite the economic downfall, the COVID-19 crisis has enhanced dynamism in the e-commerce landscape across countries. Currently, the use of e-commerce for sale and promotion is the best solution for MSMEs. It become the core business activity in this new normal normal. This is because sales and promotion through online media is easy, convinient and safe, which cutting all the physical interactions and face to face meetings (Corbitt et al., 2003). Though e-commerce proven to hold important role in todays business, not everyone know and able to participate, moreover MSMEs in the rural area. The problem was caused by the limitation of internet access, technology, infromation and knowledge of digital literacy. From six respondents, only two understant the importance e-cofommerce for business, three have ever heard and known about e-commerce, while the other one never

known about e-commerce. In terms of using e-commerce for business, all participants did not know how to operate and to use it.

The e-commerce training program objective is to make participants understand the importance of e-commerce, the important aspect in e-commerce, how to create one and how to operate it in daily basis for their business development. After three days of training, the participants feel that it is very positive and useful that they are not only understand the importance of e-commerce but also be able to open, operate and use it for their business activities. Udiana Awarawi says “I this training is very positive and useful. Now I can sell my product online and reach broader area and bigger target market.” Yubellius Usior, the head of Industry and Trade Department in Biak Numfor agreed and said that he was very grateful to be able to get training that can be directly applied using simple tools and items. He hopes the program like this can be held continuously in Biak and any other rural area.

Table 6 Focus Group Discussion Results

Name	Problems during Covid-19	Before e-commerce program	After e-commerce program	Result joining the program
Ferry Manggombo	Sales drop 70%	Ever heard about e-commerce	Understand, able to open and use e-commerce for business	E-commerce open but still only local sales, not national
Udiana Awarawi	Sales drop 50%	Ever heard about e-commerce	Understand, able to open and use e-commerce for business	E-commerce open but production still on hold because difficult to find materials
Yubellius Usior	Sales drop 50%	Know the importance of e-commerce but never use it	Understand, able to open and use e-commerce for business	E-commerce open and get some sales
Nitha Sroyer	Sales drop 60%	Know the importance of e-commerce but never use it	Understand, able to open and use e-commerce for business	E-commerce open and get some national sales
Poppy Mambor	Sales drop 50%	Ever heard about e-commerce	Understand, able to open and use e-commerce for business	E-commerce open but as the product has to be fresh, she only can sell locally
Linda Rumbrapuk	Sales drop 70%	Never know about e-commerce for business	Understand, able to open and use e-commerce for business	E-commerce open but forget how to operate it. Need more training

4. Conclusion

It stated earlier that many MSMEs, mostly in rural area have serious problem running their business during the pandemic as they only sell their products in local market offline. So more than ever it is important to introduce e-commerce and the whole online market to them.

However, the role of e-commerce to replace the traditional business activity and transaction, in fact not possible to be applied naturally in rural area as they have minimum access, knowledge, technology and digital literacy (Bahtiar, 2021). Thus, the researchers conducted this particular study to train those MSMEs in rural area, which in this case MSMEs in Biak Numfor, so they are able to take advantages from e-commerce for developing their business.

The objectives of the e-commerce training program held for MSMEs owner in Biak Numfor are; (1) the participants know and understand the importance of e-commerce for their business (2) the participants can open e-commerce account both in market place and social network, (3) they can operate and run the e-commerce, (4) they are able to generate sales and increase profit using online store, (5) the importance and the result of attending e-commerce training can answer their problem during Covid-19 pandemic.

This research examines the various results of e-commerce training program on MSME owners. This study finds that the program has affected participants in various different ways. The participants understand the importance of e-commerce and some even exercise it directly into their business. This study has proven that the program is important so that MSMEs in rural area can get the advantage of e-commerce to develop their business during the Covid-19 pandemic. This finding is in line with the study by Laksono (2021) and case study in Mexico. The study concluded that the use of technology is important for retailers today, therefore, the training of digital literacy and technology is essential for the daily activities (L&E Global, 2020).

The research contribute to give a firm confirmation that e-commerce training program is important and necessary for MSMEs mostly in rural area. Particularly, to help them in developing their business and solve their problems during the Covid-19 pandemic. Furthermore,

the different effect toward the program can be explored more in the future. To get profound result of the study, research methods should later expand with extended sampling in other rural areas, bigger number of sampling and participants and various methods, such as in deep interview and surveys. Research should be also extended to advance training, monitoring and mentoring. In

addition, include other variable such as comparison with other MSMEs who do not join the program, comparison of participants from different area and time of joining the program.

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