Dissemination of Appropriate Technology Importance and Legal Basis of BUMDES in the Pandemic Era

Yordan Gunawan¹, Muhamat Ridho Yuliyanto²

¹Department of Law, Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia
²Department of International MBA, Asia University, Taiwan, Republic of China

*Corresponding author email: yordangunawan@umy.ac.id

Abstract

This event took place in Potorono Village, Banguntapan District, Bantul Regency, Special Region of Yogyakarta. The largest issue that Potorono residents face is the large population, despite the fact that many people do not work. Essentially, the potential for employment opportunities in Potorono Village for the local community is significant, but it is not enticing enough to work for the locals. Meanwhile, the COVID-19 pandemic, which began in March 2020, has halted and failed to flourish many village community businesses. Furthermore, Potorono Village residents' understanding of the value of Village Owned Enterprises (BUMDES) has been inadequate for the growth of village residents' businesses. Furthermore, the village community has not fully capitalized on its natural potential and supporting job sectors to improve welfare. The efforts of this service are in the form of dissemination and support with appropriate technology, as well as understanding BUMDES's duty as a legal body. Furthermore, the community is informed about the use of waste processing to create finished commodities that can be sold in order to strengthen the village economy. The approach technique used by the Potorono community is based on active and interactive participation, as well as dissemination and support with the deployment of relevant technologies to the community. The community will understand the benefits of having BUMDES as a legal body in their area as a result of this service, as well as how to use technology to help rural communities grow their local economies.

Keywords: Pandemic, legal entity, technology, marketing

1. Introduction

Information technology is often used in the economic aspect, especially for the business community or productive economic community in carrying out their activities (Rahman et al., 2018). But the impact of COVID-19 has resulted in the productive economic community experiencing a decline from the economic aspect. The COVID-19 pandemic is a pandemic caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) (Handayani, et al, 2020). Corona virus disease (Covid-19) pandemic has impacted almost all aspects of life. The economy is one of the most impacted as it decreases the demand for goods and services due to supply chain disruption (UN Department of Economic and Social Affairs, 2020). Social distancing in the period of a pandemic also causes a decrease in community activity. The impact of social distancing does not only occur in economic, socio-cultural, and other aspects as well (Bhatti, 2020). Also, not many community organizations and places with strong economies know how to use the right technology.

Building Indonesia from the periphery by strengthening regions and villages within the framework of a unitary state, is one of the contents of the nine Nawacita programs of the President and Vice President of Indonesia (Oktarino et al., 2020). This is a form of development policy that is considered strategic, where strengthening the lowest area (village) becomes a milestone of national sovereignty to be able to compete globally. One of the implementations of the Nawacita program is that the Government pays great attention to villages, namely the existence of Village Owned Enterprises (BUMDES) in the Village (Simangunsong & Djaga, 2018).

This service involves a Village Owned Enterprise (BUMDES) and a community organization in the form of Family Welfare Empowerment (PKK). The COVID-19 pandemic also affected this population. Reduced income and work programs that end at these groups are a source of concern for this service. Potorono Village is a community service area with a land area of 435.46 hectares in the Banguntapan sub-district of Bantul district, consisting of nine hamlets and 83 neighborhood associations. Potorono Hamlet (BUMDES) has a population of 1518, while Mertosanan Kulon Hamlet (PKK) has a population of 2020. In 2003, students had the most jobs or livelihoods in Potorono Village,
followed by private employees. It is still low in terms of trade, with 352 people. However, the number of people who do not work is quite high, 1389 people, and may require attention because the potential for employment in Potorono Village itself is quite high. PKK Mertosanan Kulon is a well-established family planning village with shodaqoh garbage, disability assistance, and four SME groups as activity units. BUMDES has activity units in Mekaringpono Potorono, including Potorono Village Market and Village.

This service seeks to help the community improve the economy of productive groups, continue the efforts of rural communities that have stopped using social media or technology and provide knowledge about the use of technology according to the type or field in each group (Widyasari et al., 2016). So that in this pandemic era or the new normal, people, productive economic groups, and community organizations can coexist with information technology and apply it in daily life to facilitate access to communication (Brennan & Israel, 2008). Some related studies have conducted about E-Commerce or business used technology during Covid-19 previously (Mandasari & Pratama, 2020).

In the pandemic era, the (regional) development planning conceptually adapts to the new habits of people's life patterns in the era known as the new normal (Irawan, 2020). Among the new habits are working from home, schooling from home through online distance learning, and online purchasing for household daily needs. However, the implementation of the Internet of Things / IoT in some regions, faces challenges with limited infrastructure and human resource capacity (Saleh et al., 2020).

People recognize this in today's world, particularly during the Covid-19 Pandemic, which makes technology increasingly unavoidable. Apart from the negative impact on the order of life, particularly in the economic, social, and cultural sectors, the policy of limiting social activities, both Lockdowns, has a positive impact on society in terms of improving technological knowledge (Pradesha et al., 2020). The phenomenon of adaptation and social construction that occurred during the Covid-19-19-period pandemic is still being studied (Faisal et al., 2020). Indeed, technology, which brings together tools to promote the development, use, and exchange of information, has as its primary goal the simplification of tasks and the resolution of many of humanity's problems. One should emphasize how useful technology is for human life as it advances and makes life more comfortable. Technology is defined as a comprehensive process based on the systematic and thoughtful application of science and knowledge in many areas of life to achieve important and valuable goals for individuals and society (Fauzi et al., 2020).

Utilization of natural resources can be used to improve the economy, social, and culture. In addition to natural resources, the use of human resources in carrying out activities including improving the economy itself, is also developed, especially in Community Groups (PKK) to promote village welfare. Another thing that is also found in productive economic groups where people are active in using social media and utilizing existing natural resources to prosper the welfare of the group by increasing profits (Boyaci-Gündüz et al., 2021). The aspect of human resources in health facilities which can also be said to be health workers has a very important role in providing healing and safety to patients who seek treatment (Qomariah et al., 2020).

In maintaining the existence of BUMDES at the time of Covid-19, BUMDES must be able to maintain coexistence and maximize performance during the pandemic Covid-19 at the BUMDES to be able to explore and develop the economic potentials of the village, increase (PAD) and provide the best service in meeting the economic needs of the village community (Gunawan & Endyka, 2017). In this case it can be like adequate information technology so that it can easily do the job and no longer manually and seem slow (Vuori et al., 2019). The strategy and tactics of personnel management of companies are adapting to the conditions of the epidemic using a remote work format, digitalization of processes and tasks, and the use of new approaches in management (Roache et al., 2020).

2. Methodology

In this service, counseling is a method that is applied to the community (Mangipudi et al., 2019). This counseling discusses appropriate technology, the role of BUMDES as a legal entity, and the use of community waste. Counseling is carried out for the Potorono village community by the implementing team or lecturers.

After the community was given counseling, the implementation team also provided training and practice to implement the material that had been delivered. At this stage, the village community and market administrators are assisted to create a website for their business and use the Zoom meeting application. In addition, training on waste processing to be used as goods that have economic value as well as training on recording cash books for market administrators and the community.

The understanding that has been conveyed is then monitored to ensure that every element of the community, from market traders to village communities, can carry out what has been practiced in its respective businesses (Saturwa et al., 2021). Monitoring is carried out every day after the practice and training. So, the outcome is that the community can run information technology, household waste processing, as well as marketing and administration of community businesses assisted by BUMDes, which not only play a role in building village community businesses but also as legal entities.

In every program that is formed, it is hoped that it can provide benefits to the community in a sustainable manner until the community can finally develop their business and economy independently. Therefore, to make sure that this program can continue to grow, the team in charge of putting it into action has built good relationships with a number of village leaders so that it can act as a go-between for the people of Potorono village. To find out the effectiveness of this service program on economic development and the welfare of the Potorono village community, it is necessary to
carry out monitoring and evaluation (monev). This evaluation is carried out by reviewing every process that has been carried out during the specified period until the service is completed. Not only that, but this evaluation also involves parties who can contribute to providing their opinions so that in the future it can be arranged to be better than what has been done.

3. Results and Discussion

The dissemination stage in this service program discusses two things that are related to each other, namely the dissemination of the use of information technology and the use of BUMDES legal entities in Potorono village. This dissemination activity took place very interactively between the presenters and the village community, who were enthusiastic about building their businesses assisted by BUMDES. This dissemination will produce people who are capable and able to apply appropriate technology, as can be seen in Figure 1. In addition, the community also understands the importance of the role of BUMDES as a legal entity for the sustainability of their business (Hermiati et al., 2018). At this stage the community works together to build their businesses with support from BUMDes.

The activities, such as training on the use of information technology, marketing training both online and offline, training on household waste management, land management training, and training on the use of the role of BUMDes as a legal entity that supports village development (Damayanti et al., 2020). In today's digital era, various communications and transactions are carried out virtually. During this pandemic, it is difficult for MSMEs to maintain their business without any adjustment to existing conditions (Nursalim et al., 2019). Basic training related to information technology is carried out to help the community face the times.

The training conducted by Yordan Gunawan and Muhamat Ridho Yuliyanto for the Potorono village community resulted in a positive impact on the village community's economy. The community is no longer difficult with the provision of shops, because by creating a website the community can make it a place to sell the products they have. In addition, with this training, the community can easily communicate so that the process of selling the products they make can be wider, locally and internationally.

![Figure 1. Counseling on the use of information technology](image1)

![Figure 2. Assistance in the Utilization of Household Waste](image2)
Household waste is one of the largest contributors to waste in the world. Every day, people produce a very large amount of plastic waste. This, if used, can have a very significant impact as it is applied to this service program. The people of Potorono village process various household wastes, ranging from plastic to cooking oil as depicted in Figure 2. In general, this training showed mixed results, ranging from increasing awareness regarding the importance of environmental hygiene to increasing passive income for the people of Potorono village.

In addition to training on information technology, the people of Potorono are also provided with marketing training to market the products they produce. Most of the marketing processes and massive transactions are done online during this pandemic. Therefore, through this marketing training, people can design their websites so that they can attract the wider community to buy the products they produce. Not only that, but the community is also taught how to manage their businesses so that they don't lose money, which would hurt their economic growth.

As a Village Owned Enterprise, BUMDes also has a role as a legal entity that can optimize the legitimacy of their business. Legal entities play a role in maintaining the legality of business ownership owned by both the market and the village community. As for the results of this training, the public can understand the role of BUMDes. The community is provided from plagiarizing their business names because they have been registered with BUMDes.

Figure 3. Dissemination with BUMDes Officers in Potorono

Assistance is carried out after one month of the service program being implemented, as shown in Figure 3 and Figure 4. As for some of the mentoring activities carried out, such as checking back on business developments carried out by village communities, checking the use of technology in the form of zoom and websites that are used for marketing practices for selling products from the use of household waste in Potorono village, as well as checking the development of the intensity of community communication and MSME actors with related BUMDES. the business they are doing.

Figure 4. MSME Assistance
The follow-up program that emerged after reviewing the community service program can provide broader benefits, allowing it to be suggested by every element of society with several ideas or ideas that are more varied and in-depth. The successes and minor setbacks encountered during this service program can be used as benchmarks to generate more effective ideas. Furthermore, not only the organizers of this service program, but also partners, actively contribute to the form of input that is used as the foundation for the birth of new ideas that are used as a type of follow-up program. This program may provide an excellent opportunity for the people of Potorono village to start or expand their own businesses.

4. Conclusion

Several conclusions can be drawn from the description of this community service program, namely from observations, data, and the fact that the COVID-19 pandemic has significantly slowed the pace of the economy of various community parties, including the BUMDes Mekaring Pono Potorono that has been fostered. The team of this community service has tried a variety of methods to assist in the development of work programs from BUMDes Mekaring Pono Potorono, such as disseminating the role of BUMDes as a legal entity, creating social media for partners, and marketing and bookkeeping seminars in the hope that they will be useful and can provide solutions to problems that have been encountered, as well as for future economic and technological progress. The clove nursery and verticulture program at PKK Mertosanan Kulon can also help reduce plastic waste.

Acknowledgments

The authors would like to thank the Universitas Muhammadiyah Yogyakarta Office of Community Service (LPM UMY) for providing funding and resources to carry out this community service. Heartfelt thanks also go to the anonymous reviewers and editors who provided constructive feedback, making this manuscript appear worthy of reading and citing.

References

Bhatti, A., Akram, H., & Khan, A. U. (2020). E-commerce trends during covid-19 pandemic. *International Journal of Future Generation Communication and Networking, 13*(2), 1449–1452.

Boyaci-Gündüz, C. P., Ibrahim, S. A., Wei, O. C., & Galanakis, C. M. (2021). Transformation of the food sector: security and resilience during the covid-19 pandemic. *Foods, 10*(3), 1-14.

Brennan, M. A., & Israel, G. D. (2008). The power of community. *Community Development, 39*(1), 82-97.

Damayanti, F., Supriyatin, T., & Supriyatin, T. (2020). Pemanfaatan limbah minyak jelantah sebagai upaya peningkatan kepedulian masyarakat terhadap lingkungan. *Dinamisia: Jurnal Pengabdian Kepada Masyarakat, 5*(1), 161-168.

Faisal, F., Situmorang, L. S., Achmad, T., & Prastiwi, A. (2020). The role of government regulations in enhancing corporate social responsibility disclosure and firm value. *The Journal of Asian Finance, Economics and Business, 7*(8), 509–518.

Fauzi, F., Al-Khowarizmi, A.-K., & Muathir, M. (2020). The e-business community model is used to improve communication between businesses by utilizing union principles. *Journal of Informatics and Telecommunication Engineering, 3*(2), 252–257.

Gunawan, Y. & Endyka, Y. C. (2017). The protection of small and medium enterprises in Yogyakarta: The challenges of ASEAN economic community. *Pertanika Journal of Social Sciences and Humanities, 25*(S), 199 – 206.

Handayani, R. T., Arradini, D., Darmayanti, A. T., Widiyanto, A., & Atmojo, J. T. (2020). Pandemic covid-19, body immunity response, and herd immunity. *Jurnal Ilmiah Stikes Kendal, 10*(3), 373–380.

Harmiati, & Zulhamki, A. A. (2018). Ekstensi badan usaha milik desa (BUMDES) dalam mengembangkan usaha dan ekonomi masyarakat desa yang berdaya saing di era masyarakat ekonomi ASEAN. *Jurnal Sekretariat Nasional ASEAN - Indonesia, 2*(1), 1–12.

Irawan, A. (2020). Challenges and opportunities for small and medium enterprises in eastern Indonesia in facing the covid-19 pandemic and the new normal era. *TIIAB: The International Journal of Applied Business, 4*(2), 79-89.

Mandasari, I. A. C. S., & Pratama, I. G. S. (2020). The use of e-commerce during covid-19 pandemic towards revenue and volume of smmes sales. *International Research Journal of Management, IT and Social Sciences, 7*(6), 124–130.
Mangipudi, M. R., Prasad, K. D. V., & Vaidya, R. (2019). Employee performance as function of performance management system: an empirical study information technology enabled services companies around Hyderabad. European Journal of Business and Management Research, 4(4), 1-7.

Nursalim, N., Sampeallo, A. S., Wahid, A., & Meok, N. J. (2019). Upaya peningkatan produksi mebel pada UMKM kota kupang berbasis teknologi tepat guna. Dinamisia: Jurnal Pengabdian Kepada Masyarakat, 3(2), 258-265.

Oktarino, A., Afriansyah, A., & Turnip, A. (2020). Design and implementation of android-based village fund monitoring application. Internetworking Indonesia Journal, 12(1), 17–21.

Pradesha, A., Amaliah, S., Noegroho, A., & Thurlow, J. (2020). The cost of covid-19 on the Indonesian economy: a social accounting matrix (sam) multiplier approach. Bogor: International Food Policy Research Institute.

Qomariah, N., Hermawan, H., Isnaini, N. H., & Naely Azhad, M. (2020). How to improve employee performance at level 1 health facilities during the covid 19 pandemic?. International Journal of Engineering Research and Technology, 13(9), 2511–2518.

Rahmah, E., Emidar, & Zulfikarni. (2018). Pengembangan perpustakaan sekolah berbasis teknologi informasi di sma negeri 2 dan sma negeri 3 Padang. Dinamisia: Jurnal Pengabdian Kepada Masyarakat, 2(1), 6-13.

Roache, D., Rowe-Holder, D., & Muschette, R. (2020). Transitioning to online distance learning in the covid-19 era: a call for skilled leadership in higher education institutions (HEIs). International Studies in Educational Administration, 48(1), 103-110.

Saleh, H., Surya, B., Annisa Ahmad, D. N., & Manda, D. (2020). The role of natural and human resources on economic growth and regional development: With discussion of open innovation dynamics. Journal of Open Innovation: Technology, Market, and Complexity, 6(4), 103.

Saturwa, H. N., Suharno, S., & Ahmad, A. A. (2021). The impact of covid-19 pandemic on MSMES. Jurnal Ekonomi dan Bisnis, 24 (1), 65–82.

Simangunsong, F., & Djaga, A. (2018). Program implementation of e-government-based village administration and information system in West Sumba Regency. Asian Journal of Management Sciences & Education, 7(4), 71-82.

UN Department of Economic and Social Affairs. (2020). World social report 2020: inequality in a rapidly changing world.

Vuori, V., Helander, N., & Okkonen, J. (2019). Digitalization in knowledge work: the dream of enhanced performance. Cognition, Technology & Work, 21(2), 237–252.

Widyasanti, A., Putri, S.H., Dwiratna S.N.P. (2016). Upaya pemberdayaan masyarakat melalui pelatihan pembuatan produk sabun berbasis komoditas lokal di kecamatan Sukamantri Ciamis. Jurnal Aplikasi Ipteks untuk Masyarakat, 5(1), 29 – 33.